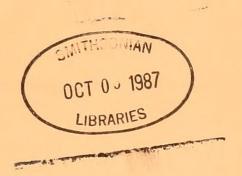




101 \$6634 CRLS SI

Smithsonian Year 1986 Supplement

Chronology and Appendixes



Smithsonian Institution Press Washington, D.C.



Smithsonian Year 1986 Supplement

Chronology and Appendixes

Smithsonian Institution Press Washington, D.C.



Contents

Chronology		5
Appendix 1.	Members of the Smithsonian Council, Boards, and Commissions, September 30, 1986	34
Appendix 2.	Smithsonian Special Foreign Currency Program Awards Made October 1, 1985, through September 30, 1986	51
Appendix 3.	National Museum Act Grants Awarded in Fiscal Year 1986	54
Appendix 4.	Academic, Research Training, and Internship Appointments in Fiscal Year 1986	56
Appendix 5.	Publications of the Smithsonian Institution Press in Fiscal Year 1986	97
Appendix 6.	Publications of the Staff of the Smithsonian Institution and Its Subsidiaries in Fiscal Year 1986	108
Appendix 7.	The Smithsonian Institution and Its Subsidiaries, September 30, 1986	218
Appendix 8.	Donors to the Smithsonian Institution in Fiscal Year 1986	270
Appendix 9.	Benefactors of the Smithsonian Institution in Fiscal Year 1986	372
Appendix 10.	Visitors to Smithsonian Institution Museums in Fiscal Year 1986	378

Note. The arrangement of bureau listings within the individual appendixes is not alphabetical but rather follows the organization of the Smithsonian Institution as shown on the next page.

The pages of this *Supplement* were photomechanically reproduced from typescript provided by the individual bureaus and offices.

Smithsonian Institution

Establishment, Board of Regents, Executive Committee, and the Secretary

Office of the Secretary

Office of the Under Secretary

Office of Audits and Investigations

Office of the General Counsel

Research

Joseph Henry Papers

National Zoological Park

Office of American Studies

Office of Fellowships and Grants

Smithsonian Astrophysical Observatory

Smithsonian Environmental Research Center

Smithsonian Institution Archives

Smithsonian Institution Libraries

Smithsonian Tropical Research Institute

Museums

Anacostia Neighborhood Museum

Archives of American Art

Center for Asian Art: Arthur M. Sackler Gallery and

Freer Gallery of Art

Conservation Analytical Laboratory

Cooper-Hewitt Museum

Hirshhorn Museum and Sculpture Garden

National Air and Space Museum

National Museum Act

National Museum of African Art

National Museum of American Art

National Museum of American History

National Museum of Natural History

National Portrait Gallery

Office of Exhibits Central

Office of Horticulture

Office of Museum Programs

Office of the Registrar

Smithsonian Institution Traveling Exhibition Service

Public Service

Office of the Committee for a Wider Audience

Office of Elementary and Secondary Education

Office of Folklife Programs

Office of Public Affairs

Office of Smithsonian Symposia and Seminars

Office of Telecommunications

Smithsonian Institution Press

Smithsonian Magazine

Smithsonian World

Visitor Information and Associates' Reception Center

Administration

Administrative and Support Activities

Financial Management Activities

Smithsonian Institution Women's Council

Smithsonian Internship Council

Directorate of International Activities

Membership and Development

Office of Membership and Development

James Smithson Society

National Board of the Smithsonian Associates

Smithsonian National Associate Program

Smithsonian Resident Associate Program

Women's Committee of the Smithsonian Associates

Under Separate Boards of Trustees

John F. Kennedy Center for the Performing Arts

National Gallery of Art

Reading Is Fundamental, Inc.

Woodrow Wilson International Center for Scholars

Smithsonian Year 1986 Chronology

The following is a representative selection of Smithsonian events and milestones during the fiscal year 1985-1986.

October

New Programs: The Office of Fellowships and Grants initiated two new Institution-wide research support programs for short-term visits and workshops.

October

Expedition: James R. Buckler, Director, Office of Horticulture, traveled extensively through China as part of a group of horticulturists invited to tour botanic gardens and arboreta.

October

Award: "Security is Everybody's Business," a video written by the Office of Protection Services and produced by the Office of Museum Programs, was awarded first place in the government category of The American Society for Industrial Security's 1985 video competition.

October

Publication: <u>Sexual Selection and Animal Genitalia</u>, a book by William Eberhard of the Smithsonian Tropical Research Institute, was published by Harvard University Press, Cambridge, Mass.

October

Visit: A Japanese delegation to the Trinational Canal Alternatives Study visited the facilities of the Smithsonian Tropical Research Institute and followed up with discussions in Washington with Assistant Secretary David Challinor and selected staff.

October

Appointment: Robert S. Hoffmann, of the University of Kansas, a leading U.S. authority on the systematics and evolution of mammals, was appointed director of National Museum of Natural History/National Museum of Man.

October

Research: National Museum of Natural History entomologist Ronald J. McGinley and colleagues from the U.S, Mexico and Panama initiated a program to promote the study of Mexican bees by encouraging cooperation between researchers in Mexico and other countries and by aiding in establishing a communication network among interested bee workers and pollination ecologists.

October

Expedition: An interdisciplinary team of National Museum of Natural History scientists, consisting of arachnologist Jon Coddington, entomologists Jerry Louton and Wayne Mathis, botanist Vicki Funk, ichthyologist Richard Vari, and herpetologist George Zug, conducted a biotic survey of a proposed Anapurna Conservation area in Nepal's mountainous Anapurna region for World Wildlife Fund and Nepalese officials interested in formation of multiuse national parks.

October 3

Exhibition: "A New Romanticism: Sixteen Artists from Italy" opened at the Hirshhorn Museum and Sculpture Garden with 46 works by some of Italy's more provocative contemporary artists, a number of whom were present for the opening.

October 3

Outreach: A grant-funded program run by the Office of Elementary and Secondary Education, "Exploring the Smithsonian," brought to the Institution the first of several junior high school classes for special interdisciplinary programs. Over the course of the school year, about 4,500 D.C. junior high school students participated in the program.

October 3

Publication: Smithsonian Institution Libraries presented the first copy of Manuscripts of the Dibner Collection, SIL Research Guide #5, published by Smithsonian Institution Libraries, to Dr. Bern Dibner, the collector of the manuscripts, at a reception in the Dibner Library.

October 3

Gift: Smithsonian Institution Libraries received 194 consecutive editions of the Old Farmer's Almanac, beginning with issues from 1792, from Yankee Publishing Co.

October 4

Enid A. Haupt Garden: The first trees were installed in the preparation of the garden, scheduled to open in the spring of 1987.

October 4

New Award: The newly created National Air and Space Museum Trophy was awarded to former NASA official Robert Gilruth and to space shuttle astronauts Kathy

Sullivan and Bruce McCandless for their contributions to the fields of aerospace science and technology. Sen. John Glenn made the trophy presentation, sponsored this year by the Federal Express Corporation and Delta Airlines.

October 11

Performance: Hanover Band of London in a Resident Associate event re-created the historic Beethoven concert of April 12, 1800, in Vienna's Burgtheater which featured the world premiere of the Symphony No. 1 in C Major, Op. 15.

October 12

Exhibition: "Shark!," a permanent exhibition featuring the jaws of Carcharodon megalodon, the colossal ancestor of the modern great white shark, opened in the fossil hall of the National Museum of Natural History.

October 15

Renovation: The Smithsonian Institution Libraries Central Reference and Loan Services renovated facility opened in the east hall of the Natural History Building.

October 17

Exhibition: "Selections from the Collection of Marion and Gustave Ring" opened at the Hirshhorn Museum and Sculpture Garden with 50 paintings and sculptures by Degas, Modigliani, Picasso, Vuillard and others, selected from the collection of the late Marion and Gustave Ring. The exhibition later traveled to the Virginia Museum of Fine Arts in Richmond.

October 18-19

Symposium: "Liberty: As Idea, Icon and Engineering Feat," sponsored by the Office of Smithsonian Symposia and Seminars, was held at the Cooper-Hewitt Museum in New York in anticipation of the centennial of the Statue of Liberty.

October 22

Lecture: Award-winning physician, biologist and author Jonas Salk lectured on "Patterns in Nature and their Possible Significance" for the Resident Associate Program.

October 22

Seminar: The Resident Associate Program and the National Museum of Natural History co-sponsored a two-day seminar, "Men of Daring, Triumphs of Exploration," featuring Geologist Stephen Jay Gould.

October 22

Loan: Two juvenile gorillas on loan from the Milwaukee Zoo arrived at the National Zoological Park. After a three-month quarantine, the two appealing youngsters were placed on exhibit.

October 24

An Evening With...: Mortimer Adler, of Encyclopaedia Britannica, appeared in a living self-portrait program co-sponsored by the National Portrait Gallery and the National Museum of American Art.

October 24

Exhibition: To celebrate the reappearance of Comet Halley, the National Air and Space Museum sponsored an art exhibition tracing the lore of comets. "Fire and Ice: A History of Comets in Art" included 90 artworks and artifacts from museums and donors around the world.

October 26-27

Symposium: "Consciousness and Survival" was held at Georgetown University under the sponsorship of the Institute of Noetic Sciences and in cooperation with the Office of Smithsonian Symposia and Seminars. Initiated by Sen. Claiborne Pell and Bishop James Spong of New Jersey, the symposium featured physicists, psychologists, biochemists, philosophers and theologians.

October 28-30

Workshop: A "Workshop in Imaging Interferometry in Space" was held in Cambridge, Mass., under cosponsorship of the Smithsonian Astrophysical Observatory.

October 29-November 7

Residencies: Semi-annual sessions of the Kellogg Museum Professionals at the Smithsonian brought senior-level museum professionals from around the United States to the Smithsonian Institution for a 10-day residency to study issues relating to museums as educational resources in their communities.

November

Quincentenary: In November and December, the Directorate of International Activities sponsored two planning conferences for the Columbus Quincentenary in 1992. National and international scholars exchanged ideas with Smithsonian staff on significant themes and topics to be incorporated into the long-term Smithsonian programs.

November

Conference: The Directorate of International Activities co-sponsored with the Social Science Research Council a major conference to explore issues concerning access to research sites by foreign scholars.

November

Meeting: The Directorate of International Activities hosted the second annual

meeting of the U.S.-Pakistan Subcommission on Education and Culture.
Participants included representatives of the Government of Pakistan and the U.S.
Information Agency, the National Science Foundation, the Department of Education, the Asia Foundation and the American Institute of Pakistan Studies.

November

Lecture: Dr. Opeoluwa Cnabajo, Department of Archaeology, University of Ife,
Nigeria, was guest lecturer on "Stone Figures of Esie, Nigeria: An Historical
Enigma," at the National Museum of African Art.

November 1-2

Symposium: The National Zoological Park's fifth annual symposium for the public, "Wildlife Survivors in the Human Niche," was held emphasizing animals that have successfully survived in cities and other human-dominated environments.

November 2

Concert and Symposium: The 20th-Century Consort gave the first of four concerts of the 1985-86 season at the Hirshhorn Museum and Sculpture Garden and celebrated the 10th anniversary of its founding with a symposium featuring American composers Stephen Albert, George Crumb and Joseph Schwantner.

November 5-6

Seminar: "British Historic Research Trust at Newington House: Some New Initiatives in Preservation" was held by the Office of Smithsonian Symposia and Seminars in connection with the National Gallery of Art's exhibition on British country houses, as part of the longstanding Smithsonian series, "Voluntarism and the Public Interest." The program featured lectures by Christopher Maltin, owner of Newington House and the Countess of Roseberry, Dalmeny House, Scotland.

November 6

Special Event: "Bamboo and Stone: Materials and Life in Tribal South India," an illustrated lecture by Caroline Stanley-Millson, was presented by the Office of Folklife Programs in conjunction with the Office of Smithsonian Symposia and Seminars, the India Council of Washington, D.C., and the Anthropological Society of Washington.

November 6

Film Premiere: "Dance of Tears," a documentary tracing the Khmer Classical Dance Troupe from Cambodia to Thai refugee camps to Washington, D.C., was shown at the National Museum of Natural History. The film was sponsored by the National Council for the Traditional Arts, the D.C. Community Humanities Council, the Khmer Classical Arts Association and the Smithsonian's Office of Folklife Programs.

November 7

Research: Smithsonian Astrophysical Observatory radio astronomers reported making the first precise measurements of the distance from Earth to an astronomical object outside our galaxy, thus establishing a new "yardstick" for determining other cosmic distances.

November 8

Exhibition: "After the Revolution: Everyday Life in America, 1780-1800" opened at the National Museum of American History. The first of the museum's reinstallations of its permanent exhibition halls, the exhibition features an 18th-century log house, rooms from Virginia and Massachusetts and more than 1,000 artifacts.

November 10

Television: The weekly "Sunday Morning" news program on CBS television featured a 10-minute segment devoted to the National Museum of African Art, including an interview with Dr. Roy Sieber, Associate Director for Collections and Research at the Museum. The segment was produced by Alan Harper and was narrated by Charles Kuralt.

November 12

Lecture: In his first major Washington address as Secretary of the Smithsonian, Robert McC. Adams delivered his 1985 Aspen Design Conference paper, which presented a historical view of the often-blending fields of design and art. This program was held in conjunction with the National Museum of American Art exhibition, "Art, Design and the Modern Corporation: The Collection of the Container Corporation of America."

November 14

Exhibition: "Magnificent Voyagers: The U.S. Exploring Expedition, 1838-1842," a yearlong exhibit that re-created the history of an epic American expedition to the South Seas and Antarctica, opened at the National Museum of Natural History, the largest special exhibit ever organized by the museum exhibits office.

November 15

Exhibition: The National Museum of American History opened "At Home on the Road: Autocamping, Motels and the Rediscovery of America," an exhibition exploring the enduring American urge to take to the highway without sacrificing the comforts of home and showing how over the years highway travel has itself become a form of entertainment.

November 17

Acquisition: The space shuttle orbiter Enterprise arrived at Washington Dulles International Airport and was officially transferred to the collection of the National Air and Space Museum three weeks later.

November 18

Special Event: The Cooper-Hewitt Museum hosted an opening celebration for the exhibition "Golden Eye: An International Tribute to the Artisans of India." The exhibition was a part of the yearlong Festival of India 1985-1986 and inspired the creation of the Golden Eye Foundation. The celebration included the 11 designers participating.

November 22

Exhibition: "Gaston Lachaise: Portrait Sculpture" opened at the National Portrait Gallery.

November 26

Reception: District of Columbia Mayor Marion Barry cohosted a reception at the National Museum of African Art, in recognition of the establishment of the sister cities agreement between Washington, D.C., and Dakar Cities Friendship Council Inc., a private voluntary organization.

December

New Program: The Directorate of International Activities announced a new funding program, the International Exchanges Program, aimed at increasing and strengthening regular exchanges between the Smithsonian and institutions in developing countries. The program will support workshops, training courses and short-term group projects.

December

Exhibition: The National Museum of African Art brought together for the first time in almost four decades the collaborative efforts of South African photographer Constance Stuart Larrabee and novelist Alan Paton, author of Cry, the Beloved Country, in an exhibition, "Go Well, My Child." Related events included a discussion with the photographer and a celebration of South African traditional songs with Welcome Msomi, noted South African author/performer.

December

Discovery: Museum zoologist Meredith L. Jones, an authority on Riftia, the giant tube worm that is a major faunal constituent of the communities living in and around seafloor hydrothermal vents, reported a new discovery bearing on the question of how the adult tube worm obtains the internal symbiotic bacteria from which the worm derives its nourishment.

December

Discovery: A Smithsonian Astrophysical Observatory scientist and a colleague at the Massachusetts Institute of Technology reported discovery of the third, and best, candidate for a black hole.

December 4-6

Symposium: The National Zoological Park conducted the Tropical Biology Conference on the positive approaches to tropical forest conservation. Successful or promising projects were highlighted. Several hundred professionals with a special interest in this topic attended.

December 5-9

Special Event: Smithsonian Associates joined National Air and Space Museum staff to view Halley's Comet during a weekend study tour created by the Smithsonian Associates Travel Program.

December 6

Special Event: In celebration of the return of Comet Halley, the National Air and Space Museum sponsored a host of free public activities, including a scientific exhibition on exploring comets, a symposium, a lecture by astronomer Carl Sagan and an evening "Once-In-A-Lifetime" party.

December 6-8

Milestone: The National Associates Travel Program celebrated its fourteenth annual Christmas at the Smithsonian Weekend for Smithsonian Associates.

December 6-13

Workshop: The Conservation Analytical Laboratory hosted a workshop on the integration of archaeological data with results of an analytical study of Greater Nicoya ceramic production and distribution. Five Costa Rican archaeologists attended this workshop together with American colleagues.

December 12

Lecture: Distinguished jurist and Smithsonian Institution Regent A. Leon Higginbotham Jr. surveyed the American legal process as it has affected blacks between 1619 and 1985.

December 13

Special Event: The Smithsonian Women's Committee held its fourteenth annual Christmas fundraising dinner-dance in the National Museum of Natural History, with "India" as the theme and His Excellency the Ambassador of India and Mrs. Bajpai as the honorary patrons.

December 14

Seminar: "Currents," a seminar for high-school juniors in the Washington, D.C., metropolitan area, was initiated by the Hirshhorn Museum and Sculpture Garden. Students' observations about the "New Romanticism" exhibition of contemporary Italian painting, the focus of the seminar, were later published.

December 18

Pledge: The Visitor Information and Associates' Reception Center received from the Pew Memorial Trust a pledge of \$1 million toward the construction of the new Smithsonian Information Center.

December 19

Comet Watch: The first of several "Halley observing" sessions was held for the public at the Smithsonian Astrophysical Observatory in Cambridge, Mass. More than 750 people attended the sessions, scheduled periodically through May 2, attempting a glimpse of the famous comet.

December 20

Exhibition: The ninth annual "Trees of Christmas" exhibition, developed by the Office of Horticulture in conjunction with the National Museum of American History, opened with 13 trees decorated to display the ethnic, artistic and cultural use of the Christmas tree.

December 26-31

Holiday Event: The National Museum of American History offered its annual Holiday Celebration, which this year focused on the theme "Our Ethnic Heritage" and drew on the talents of more than 600 musicians, storytellers and demonstrators of ethnic crafts and cooking.

December 28

Milestone: Two hundred eighty-three pieces of antique cutlery from the Robert L. Metzenberg collection dating from the 16th through 19th centuries were added to the collections of the Cooper-Hewitt Museum.

January

Public Programs: Throughout 1986, special "Halley observing" sessions were scheduled for the public at the Smithsonian Astrophysical Observatory in Cambridge, Mass., and attracted more than 750 people attempting a glimpse of the famous comet.

January

Research: Smithsonian Astrophysical Observatory scientists presented a new map of the universe showing that the galaxies are distributed on the surfaces of large, bubblelike voids up to 150 million light years in diameter.

January

Restoration: The historic restoration of the Renwick Gallery facade and window replacement was completed in early January for a total cost of \$5,600,000.

January

PCB Progress: The Smithsonian received a "Letter of Compliance" from the U.S. Environmental Protection Agency indicating that the Smithsonian is now in compliance with all regulations concerning PCB transformers.

January

Expedition: Following the catastrophic eruption of Nevada del Ruiz in the Colombian Andes, which destroyed villages and caused the deaths of about 24,000 people, a multidisciplinary museum team, headed by Smithsonian scientists William Melson (volcanologist), Vicki Funk (botanist) and Gary Graves (ornithologist), flew to Colombia to study the eruption and its long-term impact on the environment.

January

Award: Museum archaeologist Betty J. Meggers was awarded the Secretary's Gold Medal for Exceptional Service for her innovative research in pre-Columbian archaeology and her achievements in cementing the professional bonds between the Northern and Southern hemispheres.

January 1

Fellow: LaBelle Prussin, Professor of Architecture, University of Washington, Seattle, began residency at the National Museum of African Art as the first recipient of the Rockefeller Foundation Residential Program in the Humanities. Dr. Prussin's topic was "Nomadic African Women as Place Makers: The Arts and Architecture of Nomadism in Africa."

January 2

Acquisition: The National Museum of American Art accessioned Thomas Eakins' 1908 painting "William Rush's Model," a major gift from Mr. and Mrs. R. Crosby Kemper Jr.

January 5-18

Seminars: "British Country Homes," offered by the National Associates Lecture and Seminar Program, featured 11 British scholars who conducted special lectures and tours of the National Gallery of Art exhibition "Treasure Houses of Britain."

January 7-8

Conference: The Native American Museums Program of the Office of Museum Programs convened a Native American Archives Advisory Conference in Harpers Ferry, West Virginia.

January 10

Exhibition: "Music and Dance of Papua, New Guinea," (Jan. 10- Mar.9), opened at the National Museum of Natural History, an exhibition of the Smithsonian

Institution Traveling Exhibition Service. Featured were color photographs of the brilliantly colorful ceremonial costumes, personal adornment, and dances of the people of Papua New Guinea by photographer Jordan Wright.

January 13-14

Workshop: The Smithsonian Environmental Research Center sponsored a workshop in which 15 experts discussed landscape ecology with the goal of developing a better theoretical basis for this field of ecology.

January 26

Announcement: A campaign to save more than 800,000 feet of historic aviation newsreel footage was launched by the National Air and Space Museum and the University of South Carolina. The footage covers almost every major event and personality in aviation history.

January 27

Course: The Office of Museum Program's Native American Museums Program convened a 10-month course entitled "Design and Production of Exhibitions," consisting of a workshop and practical and technical assistance for mid-career staff of 10 tribal museums.

January 29

Lecture: In one of a series of programs at the National Museum of American Art's Barney Studio House, artist Grace Hartigan, whose work is in the museum's collections, discussed her early years as a member of the New York School of painting.

February

Black History Month: Films, concerts, lectures and storytelling programs were scheduled throughout the Smithsonian museums. "Black American Popular Music: Rhythm & Blues, 1945-1955" combined a symposium, concerts and an exhibition at the National Museum of American History to explore the development and influence of rhythm and blues music during the postwar period. Other highlights included a Resident Associate Program series on early black cinema and performance by jazz legend Billy Taylor.

February

Gift: Hans Panofsky, Curator of the Melville J. Herskovits Library of African Studies, Northwestern University, transferred 90 original black-and-white negatives donated by anthropologist Eva L. R. Meyerowitz to the National Museum of African Art. Included are photographs taken in Abomey, Dahomey, 1937.

February

Collection Management: A new dry-nitrogen storage facility for Antarctic meteorites was installed at the Museum Support Center, making it possible for

hundreds of meteorite specimens gathered in Antarctica during the last decade by National Science Foundation expeditions to be permanently turned over to National Museum of Natural History.

February

Telecast: "Here at the Smithsonian," the series of three-minute features on people and events at the Institution, produced by the Office of Telecommunications, began its fifth season with new distribution via satellite, tripling its subscriber stations to 180.

February 3

Outreach: The Career Awareness Program of the Office of Elementary and Secondary Education convened its newly formed Advisory Council; the program works to introduce students from the D.C. Public Schools to career opportunities at the Smithsonian.

February 5

Acquisition: The National Museum of American History accepted an International Harvester model 1486 tractor, made in 1979, from members of the American Agriculture Movement.

February 6

Exhibition: "Directions 1986," continuing the Hirshhorn Museum and Sculpture Garden's well-known series of contemporary art exhibitions, opened at the museum with 36 works by eight American artists, three of whom appeared in a round-table that evening with the exhibition's curator, Phyllis Rosenzweig.

February 18-20

Seminar: The Office of Protection Services conducted its ninth annual security conference, which was attended by over 150 security professionals. Besides the traditional focus on the theme "security is everybody's business," special emphasis was placed on library protection and building management.

February 20

Exhibition: "Treasures from the National Museum of American Art," an exhibition of 81 works from the museum collection, opened at the Seattle Art Museum. Its 13-month national tour included showings at the Minneapolis Institute of Arts, the Amon Carter Museum in Fort Worth and the High Museum of Art in Atlanta.

February 28-March 1

Symposium: A special symposium for high school teachers and students was conducted at the National Zoological Park, with the goal of educating students about careers in science.

March

New Office: The Safety Division, Office of Protection Services, was established as the separate Office of Safety Programs in order to increase the visibility of its programs which are of increasing concern to the Institution.

March

Publication: <u>High Technology and Human Freedom</u>, a volume based on the Smithsonian's Office of Symposia and Seminars' eighth international symposium, a tribute to George Orwell, was published under the editorship of Lewis H. Lapham, editor of "Harper's."

March

Research: New isotopic and chemical clues to the nature of the earliest solar system solid material were provided by a study of the meteorite Vigarano, from Vigrano, Italy, initiated by the National Museum of Natural History meteorite curator Glenn J. MacPherson. His research is being conducted with collaborating scientists from the University of Chicago and Washington University, St. Louis.

March

Award: The Gold Medal and Diploma of the International Scientific Festival was awarded to "The Sea: A Quest for Our Future," a film produced by the Office of Telecommunications.

March

Research: Former Smithsonian Astrophysical Observatory director, Fred L. Whipple, participated in control center operations for the historic encounters with Halley's Comet by Giotto and Russian Vaga spacecraft, which confirmed his classic "dirty snowball" model for a cometary nucleus.

March

Gift: The U.S. Army transferred to the Smithsonian Tropical Research Institute the use of the Surfside Theater Building at Naos Island.

March

Exhibit: "Galapagos—Born of the Sea," an exhibit circulated by the Smithsonian Traveling Exhibition Service opened at the Anthropological Museum in Panama, cosponsored by the Smithsonian Tropical Research Institute and the National Institute of Culture of the Government of Panama. All materials were translated into Spanish.

March

Grant: Smithsonian Institution Libraries received \$3,000 from the Women's Committee of the Smithsonian Associates for the restoration of a 1852 photographic album of London's Crystal Palace exposition, a holding of the Cooper-Hewitt Museum Branch Library collection.

March 2

Special Event: International Seal Day was celebrated at the National Zoological Park with a special public program of of seal training demonstrations, talks and touchable objects such as pelts and skulls.

March 15

Acquisition: Ten golden-headed lion tamarin monkeys arrived at the National Zoological Park from Brazil. Their arrival marked the first step in the establishment of a breeding program at the Zoo to ensure long-term survival of this highly endangered species.

March 16-19

Conference: The First National Conference on Women's Changing Roles in Museums was cosponsored by the Office of Museum Programs and the Smithsonian Institution's Women's Council.

March 17

Acquisition: An excavated cache of neolithic plaster statues from the site of 'Ain-Ghazal, Jordan, arrived at the Conservation Analytical Laboratory. These pieces, which date back to about 7000 B.C., will receive special conservation treatment under the terms of a agreement between the Department of Antiquities of Jordan and the Smithsonian's Conservation Analytical Laboratory.

March 17 - May 9

Field Course: The Smithsonian Tropical Research Institute and the University of Panama offered the second Graduate Field Course in Tropical Ecology with the participation of students from Panama, Honduras, Guatemala, Costa Rica and Haiti. More than 20 scientists from national and international institutions were invited speakers.

March 19

Benefit: A dinner for Sister Parish was held to benefit the Decorative Arts Committee of the Cooper-Hewitt Museum. Funds raised were used to purchase two wallpaper sample books used originally by French firms in the 1920s.

March 20

Acquisition: The National Museum of American History accepted a mobile support vehicle, space suit, bubble-shaped isolation units, medical literature and memorabilia documenting the life of David, called the "bubble boy," who was born with severe combined immune deficiency (SCID) and confined to a sterile, bubblelike environment for nearly all of his 12 year of life.

March 24-28

Course: Woodcarving and Conservation of Carved Surfaces, a hands-on course for furniture conservators, was taught at the Conservation Analytical Laboratory by Wallace Gussler of Colonial Williamsburg, and was attended by 10 professionals.

April

Film: The Office of Telecommunications completed a five-minute exhibit film "Looking at Earth," for the National Air & Space Museum.

April

Awards: The Office of Fellowships and Grants announced the 1986-87 James E. Webb fellowship recipients.

April

Discovery: International team of radio astronomers, including Smithsonian Astrophysical Observatory scientists, announced a new distance measurement to the center of the Milky Way, thus reducing the size of our galaxy by one-third.

April

Expedition: A Moroccan field expedition was carried out by a Smithsonian-National Geographical Society international team of paleontologists searching for the ancient Strait of Gibraltar. This project, headed by museum paleobiologist Richard H. Benson is providing historical evidence of the formation of the mountain systems.

April

Telecast: "Smithsonian Treasures: An American Experience," a 90-minute television special funded by Wang, Inc. and hosted by actor Gene Kelly, was telecast by the Office of Telecommunications during Easter week.

April 2

Premiere Issue: Air & Space/Smithsonian, a bi-monthly magazine in the tradition of Smithsonian magazine, launched its first issue. The magazine, geared to the general audience as well as the aerospace buff, recounts the history of flight and the latest discoveries in the aerospace world.

April 5

Premiere: The Resident Associate Program hosted the Washington premiere of the Canadian film, "My American Cousin." The film was introduced by Canadian writer Sondra Gotlieb, author of <u>Wife of...</u> and wife of the Ambassador of Canada.

April 10

An Evening With...: Dancer Katherine Dunham appeared in a living self-portrait program at the National Portrait Gallery.

April 12

Exhibit Renovation: The National Zoological Park began renovation of the basement of the Reptile House began, the principal step in converting the facility into the new vertebrate exhibit.

April 15

Fellowships: The Office of Fellowships and Grants designated 101 1986-87 fellowship recipients.

April 18-20

Special Event: The Smithsonian Women's Committee sponsored the fourth annual Washington Craft Show, a juried show with 100 craftspeople participating. Proceeds from the show and the preview night party were used to fund various educational and research projects throughout the Smithsonian.

April 21

Special Event: The Mayor of Nuremburg, Germany, attended the opening celebration at the Cooper-Hewitt Museum for the exhibition "Toys from the Spielzeug Museum."

April 23

Special Event: "Sailing Ships and Old Salts," a weekend family festival featuring sea chanteys and demonstrations and workshops on maritime-related arts and crafts was held at the National Museum of Natural History in conjunction with the exhibition "Magnificent Voyagers."

April 24

Restoration: The first phase of the reconstructed Olmsted Walk was completed by the contractor and accepted by the National Zoological Park.

April 25

Exhibitions: Two exhibitions, "Portraits by Brady: Imperial Photographs from the Harvard College Library" and "John Frazee, Sculptor," opened at the National Portrait Gallery.

April 28

Special Event: Cooper-Hewitt Museum celebrated the opening of the exhibition "Bon Voyage: Designs for Travel" and the accompanying catalog, made possible through the generosity of the Louis Vuitton Company.

April 30

Exhibition: "Robert Armeson: A Retrospective" opened at the Hirshhorn Museum and Sculpture Garden with 68 works by this California sculptor, the first major East Coast showing for the artist. Opening activities included a lecture by the exhibition's curator, Neil Benezra of the Art Institute of Chicago.

May

Exhibition: Recent field research on the art of the Bamana people of Mali resulted in an exhibition titled, "A Human Ideal in African Art: Bamana

Figurative Sculpture." The exhibition was the first organized by the National Museum of African Art to travel to the Metropolitan Museum of Art, New York.

May

Publications: Major works on Plains Indians were produced by Waldo R. Wedel, archaeologist emeritus, and John C. Ewers, ethnologist emeritus, both of the National Museum of Natural History. Dr. Wedel's <u>Central Plains Prehistory</u>: Holocene Environments and <u>Culture Change in the Republican River Basin</u>, published by the University of Nebraska Press, is the first full-scale review and synthesis of central Plains prehistory. Dr. Ewers' <u>Plains Indian Sculpture</u>: A <u>Traditional Art From America's Heartland</u>, published by the Smithsonian Institution Press, is the first comprehensive look at Plains Indian sculpture.

May

Acquisition: An important algal herbarium was donated to the National Museum of Natural History by Florida State University. Included were about 8,000 specimens, most of which are from the Bahamas and Florida Keys, where the Smithsonian is engaged in marine biological research.

May

Guest Lecturers: Resident Associate Program course, "Literary Evenings: Writers on Writing," featured Pulitzer Prize winner Larry McMurtry, Peter Benchley, Martin Cruz Smith and Jean Auel.

May

Grant: Smithsonian Institution Libraries received three grants totaling \$39,000 from the Atherton Seidell Endowment Fund. The grants will be used by Catalog Records to publish scientific records in non-Roman alphabets, by the Smithsonian Astrophysical Observatory Branch Library to acquire documentation on astronomical data analysis systems, and by the Smithsonian Tropical Research Institute Branch Library to acquire microform back issues of scientific journals.

May

Expedition: Dr. Ernani Menez of the Oceanographic Sorting Center led a field party of U.S. and Filipino scientists to Siayan Island, a remote, biologically unexplored offshore area of the northern Philippines, to make collections of marine plants containing active natural substances of value as anticancer drugs. The expedition was jointly funded by the Smithsonian and the National Cancer Institute.

May

Special Event: The Directorate of International Activities organized a reception to recognize the establishment of a memorial fund through a gift from the estate of Suzanne Liebers Erickson. The fund will support exchange visits between Smithsonian staff and Danish scholars, museum professionals and students for research collaboration, consultations and seminar participation.

May

Visit: John Seiberling, Anthony Beilenson and Ron de Lugo, members of the Committee on Interior and Insular Affairs of the U. S. House of Representatives, visited the Smithsonian Tropical Research Institute and met with representatives from Panama's Department of Renewable Resources and private conservation groups.

May

Awards: "Coral Reefs: New Discoveries, New Resources" received the Minister of Foreign Affairs' Silver Cup in Milan, Italy and the Silver Award at the Houston International Film Festival. "The Big Cats and How They Came to Be" placed first at the National Educational Film Festival in the science/ecology category. Both films were produced by the Office of Telecommunications.

May 6

Special Event: James Smithson Society members enjoyed a private visit to the residence of David Lloyd Kreeger. The house, designed by Philip Johnson, is filled with Impressionist, Post-Impressionist, and Modern masterpieces.

May 6-9

Symposium: "Man and Beast Revisited," a special Smithsonian symposium, was held at Front Royal, Va., and at the National Zoological Park as a sequel to the intellectual landmark, "Man and Beast: Comparative Social Behavior" (1969). A new volume is being edited by Michael H. Robinson, zoologist, and Lionel Tiger, anthropologist.

May 6-10

International Congress: The Smithsonian Kellogg Project, in conjunction with the Children's Museum, Indianapolis, conducted an International Congress on Learning in Museums. Teams of senior museum professionals from 22 museums in the United States and Canada participated.

May 7

Collection Management: A group of works from the Hirshhorn Museum and Sculpture Garden's permanent collection were sold by a New York auction house, the first of a number to be auctioned off over the next few years to benefit the museum's collection. Provision for such action was stipulated by Joseph H. Hirshhorn in his bequest.

May 8

Exhibition: The National Air and Space Museum opened a major gallery, "Looking at Earth," that explores the history of aerial and orbital views of the Earth, from camera-carrying pigeons to aircraft to satellites.

May 9

Research: A 55,000-gallon oil spill at Panama's oil refinery reached the reef at Galeta Point, the site of the Smithsonian Tropical Research Institute's Atlantic laboratory where long-term studies of animal and plant population variations and their causes are conducted. The Mineral Management Service of the U.S. Department of the Interior provided funds for short-term studies of the ecological impact of the oil spill.

May 10-13

Workshop: In Chicago, the first on-site "Policy and Management" workshop for directors and trustees of museums from the membership of the African-American Museum Association was coordinated by the Office of Museum Programs.

May 12

Open House: The Smithsonian Office of Public Affairs held a Behind-the-Scenes Day open house for feature writers at the Smithsonian Environmental Research Center in Edgewater, Md. It was attended by a dozen members of the press and generated publicity in both the print and television media.

May 13

Milestone: A first in a series of three think-tank conferences was held at the Cooper-Hewitt Museum. Prominent design professionals discussed issues of both theoretical and practical significance to the museum.

May 13

Guest Lecturers: Resident Associate Program began its three-part series, "Lillian Gish, Girger Rogers, and Sally Field: Three Generations of Hollywood Actresses," cosponsored with the National Museum of American History. The three actresses were featured, sharing reminiscences of their careers.

May 14-23

Residencies: Semi-annual sessions of the Kellogg Museum Professionals at the Smithsonian brought senior-level museum professionals from around the United States to the Smithsonian Institution for a 10-day residency to study issues relating to museums as educational resources in their communities.

May 15

Publication: Symposium proceedings entitled "Watershed Research Perspectives" was published by the Smithsonian Institution Press for the Smithsonian Environmental Research Center. The fifteen chapters cover verious aspects of the nutrient dynamics of complex watersheds, the role of riparian vegetation, and the effects of acid deposition. This volume and a previous volume (1977) are the only such watershed research symposia ever published.

May 15

Exhibition: Hydrolab, a stationary underwater laboratory, was placed on longterm exhibition at the National Museum of Natural History. The laboratory revolutionized oceanogrpahic research by permitting scientists to live and work in the depths of the sea for lengthy periods.

May 16

Gift: An adult male fennec fox was presented to the National Zoological Park by the Hai-Bar (Wildlife) Society of Israel.

May 17

Research: After ten years of planning and research, Smithsonian Astrophysical Observatory scientists succeeded in operating an atomic clock to within one-half degree of absolute zero, a temperature that is expected to allow maintenance of a time signal 1000 times more accurate than any other clock.

May 19

Special Event: The Ambassador to the United States from Hungary attended the opening at the Cooper-Hewitt Museum for "Treasures from Hungary: Gold and Silver from the 9th-19th Centuries," an exhibition initiated by the Cooper-Hewitt Museum and produced by Smithsonian Institution Traveling Exhibition Service.

May 19

Challenge Grant: The Visitor Information and Associate's Reception Center received from the Kresge Foundation a \$500,000 challenge grant toward the construction of its new Information Center.

May 21

Award: Louise Steele, a 15-year volunteer with the Visitor Information and Associate's Reception Center, was the recipient of the first Washington Convention and Visitors Association's 1986 Hospitality Award for Outstanding Volunteer.

May 23

Exhibition: "Through Light and Shadow: Photographs by Clara Sipprell," opened at the National Portrait Gallery.

May-June

International Program: The Office of Museum Programs/USIA Project on Museum Education brought seven international participants to Washington to join with the Kellogg Museum Professionals at the Smithsonian. The group visited Kellogg Project demonstration projects in six U.S. cities in a 30-day exchange program.

June

Special Event: Honors ceremonies were held for the 1985-86 Smithsonian Fellows.

June

New Program: A permanent American Indian Program was established at the National Museum of American History to bring Native American perspectives to museum exhibitions, public programs and outreach projects.

June

Acquisition: A rare Vili (Congo) ivory staff top, a chief's emblem of office, circa 19th century or earlier, was purchased by the National Museum of African Art.

June

Grant: A grant was received by the office of Horticulture from the James Smithson Society to acquire equipment to prepare The Garden Club of America slide collection "Slide Library of Notable Parks and Gardens" for transfer to a laser disc.

June

Research: A high-resolution imager, designed and built by the Smithsonian Astrophysical Observatory for the German ROSAT X-ray satellite, was completed and tested.

June

Video Pilot: "Smithsonian Quest," the pilot program for a children's television series from the Institution, was completed by the Office of Telecommunications.

June 2

New Office: The Office of the Keeper of the Smithsonian Institution Building was reorganized as the Office of Architectural History and Historic Preservation with a principal responsibility for the study of the architectural history of all 14 major Smithsonian buildings and their preservation.

June 4

Awards: The Smithsonian News Service was honored by the National Association of Government Communicators, receiving first, third and honorable mention awards in the feature release category of the Blue Pencil Awards. Research Reports, a publication of the Office of Public Affairs, placed second in the newsletter category. The Torch, the Smithsonian staff newspaper also published by OPA, placed first in its category of the Blue Pencil competition and in May received the highest award presented by the Society for Technical Publications Competition.

June 4

Grant: Smithsonian Institution Libraries was awarded \$100,000 equivalent in Pakistani rupees by the Smithsonian Foreign Currency Program to fund part of its Translation Publishing Program.

June 5

Special Event: World Environment Day was celebrated at the National Zoological Park with information displays and an evening concert. Collaborating with the Zoo in producing this event was the United Nations Environment Programme and the Global Tomorrow Coalition.

June 6

Exhibition: "Fields of Grass," an exhibition of drawings, watercolors and prints of grasses by artists from the 16th century to the present, opened at the National Museum of Natural History.

June 9

Special Program: The High School Summer Intern Program began its first session under the auspices of the Office of Elementary and Secondary Education.

June 14

Exhibition: "Davy Crockett: Gentleman from the Cane" opened at the National Portrait Gallery.

June 17

Grant: The Alfred P. Sloan Foundation awarded a grant to the Smithsonian Institution to support the videotaping of interviews about "Science in National Life." The project will explore potentials inherent in adding a visual component to historical research projects on recent history of science already underway in a number of Smithsonian bureaus. Project staff is based in the Smithsonian Archives.

June 18

Special Event: The Smithsonian Archives commemorated the 100th anniversary of the birth of Alexander Wetmore, sixth Secretary of the Smithsonian, with the opening of an exhibition entitled "Alexander Wetmore: The Early Years, 1900-1925." Films of Dr. Wetmore's expeditions to Panama with Watson M. Perrygo in the 1950s were screened and a reception followed.

June 19

Report: A nine-month self-study of the Smithsonian Libraries Preservation Planning Program was completed and a report submitted by Nancy E. Gwinn, Assistant Director, Collections Management, under direction of the Association of Research Libraries.

June 19

Premiere: "On the Wing," a new large-screen film that dramatized the dynamic relationship between mechanical and natural flight, premiered at the National Air and Space Museum's Samuel P. Largley Theater.

June 20

Exhibitions: Twin exhibitions, "Patent Pending: Models of Invention" and "Invention and Enterprise," opened at the National Museum of American History. The exhibitions commemorated the 150th anniversary of the 1836 Patent Act, and helped to launch the joint Smithsonian Institution-United States Patent Model Foundation campaign to raise \$20 million for acquiring some 100,000 patent models scattered across the country.

June 20

Research: The Smithsonian Conservation Analytical Laboratory, the Getty Conservation Institute and the Canadian Conservation Institute agreed to a joint research project, with financial support from the Getty Conservation Institute, into the effects of various fumigants on the stability of materials in museum objects.

June 23

Seminars: The Office of Elementary and Secondary Education began its 1986 series of summer seminars for teachers; this year the program included ten seminars for local teachers from the Washington, D.C. area and two graduate courses for teachers from other parts of the United States.

June 23-27

Performance: The Franz Liszt Centennial Celebration, featuring international virtuosi in recital, was cosponsored by the Resident Associate Program, the John F. Kennedy Center for the Performing Arts, and the Library of Congress.

June 25-29; July 2-6

Folklife Festival: The 20th annual Festival of American Folklife featured rice in Japanese folk culture, Tennessee folklife, the conservation of traditional crafts in ethnic, indigenous and regional communities in the United States, and the occupational folklife of American trial lawyers. A music stage to celebrate the Festival's 20th anniversary and dance parties were also included. A related ethnographic film series began on June 25 organized by the Office of Folklife Programs, the Human Studies Film Archives and the Museum of Natural History's Office of Education.

June 27

Exhibition: "The Earliest Traces of Life," a permanent exhibition in the National Museum of Natural History fossil hall, highlighted a 3.5 billion-year-old stromatolite, a fossilized mass of blue-green algae and bacteria, the oldest direct evidence of life on earth.

July

Brochure: The first brochure on the facilities, research and resources of the Department of Botany, Museum of Natural History, was written and produced by the Office of Public Affairs and designed by the Smithsonian Institution Press.

July

Grant: The National Museum of American History received a generous grant from the Norfolk Southern Foundation to help produce a new major permanent exhibition, "Engines of Change: The American Industrial Revolution, 1790-1860."

July

Milestone: Smithsonian Institution Libraries launched a bar-coding project for circulation and inventory control, subsequently producing over 300,000 bar-code labels from a bibliographic database.

July

Acquisition: The Olle Pellmyr Collection of Fennoscandian Lepidoptera arrived at the National Museum of Natural History. This collection of nearly 7,000 specimens was accumulated during pollination studies and will be used for comparison and research purposes.

July

Film Production: "The Movie Palaces," a half-hour film funded by the National Endowment for the Arts and produced by the Office of Telecommunications, was completed.

July 1

Anniversary: The National Air and Space Museum marked its 10th anniversary, a decade highlighted by record-breaking attendance, an expanded commitment to historical and scientific research, award-winning films and a new national magazine, Air & Space/Smithsonian.

July 3

Special Event: The Festival of American Folklife Japan Program hosted an evening for the Contributing Membership of the Smithsonian's National Associate Program, co-sponsored by the Embassy of Japan.

July 21

Information System: The Conservation Analytical Laboratory became an active contributing member of the international Conservation Information Network. This new information system, still in an experimental, developmental stage, is expected to become a major source of technical information for conservation specialists worldwide.

July 24

Obituary: Adelyn Dohme Breeskin, Senior Curatorial Advisor at the National Museum of American Art and a pre-eminent Mary Cassatt scholar, died in northern Italy a little more than a week after celebrating her 90th birthday at the museum

with friends and colleagues. Among the works of art given to the museum in her honor on that memorable occasion were Jacob Kainen's painting "Dabrowsky V" and James Surls' sculpture "Black and White tipped Flower."

July 25

Exhibition: Ornamental and agromic grasses, grown and installed by the Office of Horticulture, were exhibited at the first International Grass Symposium.

July 27

Symposium: The first international grass symposium on grass systematics and evolution was held under the sponsorship of the Smithsonian, the American Institute of Biological Sciences, and the National Science Foundation. Museum botanist Thomas Soderstrom played a major role in planning the symposium, attended by 150 scientists from the U.S. and abroad.

July 29

Symposium: "Our Next 50 Years: A Look at the U.S. Space Program," held at the National Air and Space Museum, brought together a panel of experts to discuss the findings and recommendations for the 21st century that were made by the presidentially appointed National Commission on Space.

August

Calendar: The Smithsonian calendar of events, produced by the Office of Public Affairs, was redesigned to achieve a more readable and useful format. The calendar continues to be published as a paid monthly advertisement in the Washington Post.

August

New Program: The Directorate of International Activities began a pilot threeyear program in cooperation with the National Museum of Natural History and the international Man and the Biosphere Program, with a goal of designing a practical, standardized methodology for collecting and managing biotic inventory and other biological data in all biosphere reserves, potential reserves and other endangered habitats.

August

Publication: <u>Great Basin</u>, sixth in the Smithsonian's projected twenty-volume encyclopedic Hardbook of North American Indians, was published by the Smithsonian Institution Press and the National Museum of Natural History.

August

Exhibition: "Thomas T. Thompson Trilobite Collection," a display of the largest and finest personal collection of North American trilobites, opened at the National Museum of Natural History.

August 6

Audiovisual: "A Living Legacy: The Woodrow Wilson House Museum," a videotape addressing historic house museum issues, premiered at the Office of Museum Programs.

August 7

Exhibition: "Selections from the Joseph H. Hirshhorn Bequest," the first public showing of a significant group of works from the 1981 bequest of the museum's founding donor, opened at the Hirshhorn Museum and Sculpture Garden.

August 8

Installation: The redesigned Doris M. Magowan Gallery of Portrait Miniatures opened at the National Museum of American Art. One hundred examples from the museum's collection—many not previously shown publicly—survey the history of the American miniature portrait from the latter half of the 18th century through the mid-19th century.

August 20

Exhibition: The special education exhibit, "ZocArk," opened at the National Zoological Park with interpretive, interactive modules in six animal houses. Thought-provoking quizzes and innovative computer games encourage visitors to learn about conservation issues.

August 23-28

New Program: The Conservation Analytical Laboratory's new furniture conservation training program began with the inaugural course, "Wood Technology." Six students were accepted from among 75 applicants for the first class, which will graduate in 1990.

August 24-29

Symposium: The Smithsonian Astrophysical Observatory cosponsored IAU Symposium 126, "The Harlow Shapley Symposium on Globular Cluster Systems in Galaxies," at Cambridge, Mass.

August 25

Special Event: Sponsoring, Sustaining, Patron and James Smithson Society members of the Contributing Membership were invited to attend "An Evening at the Navy Memorial Museum." Members had access to the museum's entire exhibition, and the evening included a reception and performance by members of The Commodores, the Navy's jazz ensemble.

August 31

Milestone: Membership in the Contributing Membership Program exceeded 40,000 for the first time since the Program's 1976 inception.

September

Publication: With the autumn 1986 issue, the circulation of Research Reports, a three-times-a-year periodical produced by the Office of Public Affairs on research in the sciences, art and history at the Institution, reached 45,500, an increase of 10,000 over 1985.

September

TV PSA: A public service announcement for television use was produced by the Office of Public Affairs for television use in the greater Washington, D.C. area, reminding residents to enjoy the Smithsonian—their local museums—while summer crowds are gone.

September

Forum: To initiate programs focused on biological diversity, the Directorate of International Activities joined with the National Academy of Sciences to organize a highly successful National Forum on BioDiversity. The four-day, well-publicized event provided the public and media with the learned views of distinguished scientists and scholars on the subject of the rapid destruction of the Earth's natural habitats and the subsequent loss of plants and animals. Concurrent with the Forum was a poster-panel exhibition, film showings, displays of literature and audio-visual materials and the Smithsonian's first live national teleconference via satellite and cable.

September

Automated Systems: The decision was made to use the U.S. Department of Agriculture's service bureau, the National Finance Center, for the Institution's personnel management, payroll and reporting computer systems. A contract will be negotiated with processing anticipated to begin mid-1987.

September

Visit: Kenton Miller, Director General of the International Union for the Conservation of Nature, visited Panama to discuss the sponsorship and scheduling of the Fourth World National Parks Congress to be held in 1992. The Smithsonian Tropical Research Institution was instrumental in promoting this action and has offered its assistance towards the planning and conduct of this international event in Panama.

September

Milestone: Smithsonian Institution Libraries staff began using Electronic Mail for intralibrary communications.

September

Research: Seventy-five scientists from the Smithsonian and other institutions throughout the world began a long-term multidisciplinary study of a mangrove ecosystem at Twin Cays, Belize, Central America, sponsored by the National Museum of Natural History.

September

Research: Analysis of data assembled in a pioneering 10-year study of tropical bats at Barro Colorado Island, Panama, by National Museum of Natural History mammalogist Charles O. Handley, continued in 1986. Dr. Handley's work is illuminating the demography and natural history of a population of tropical bats and their important role in tropical forest ecology.

September

Research: At the Smithsonian Marine Station at Link Port, National Museum of Natural History scientist M. G. Harasewych, began studies of mollusks, using DNA hybridization and isoenzyme electrophoresis techniques to confirm the evolutionary relationships inferred on the basis of shell morphometric and anatomical data. This represents one of the first efforts to use DNA techniques to study molluscan evolution.

September 1

News Service: Electronic transmission of the Smithsonian News Service to selected daily newspapers began via Associated Press Data Feature, a computerized wire service. A total of 1,550 other publications continue to receive the News Service monthly feature stories, written and distributed by the Office of Public Affairs, by mail.

September 1

Spanish Edition: The first Spanish-language edition of the Smithsonian News Service, a product of the Office of Public Affairs, was distributed to 80 Spanish language newspapers in 19 states, Washington, D.C, Puerto Rico, Canada and Colombia.

September 12

Exhibition: "Unknown Territory: Photographs by Ray K. Metzker" opened at the National Museum of American art with 190 photographs documenting Metzger's experimentation with photographic techniques. The artist discussed his work at a subsequent complementary program.

September 12

Special Event: Sponsoring, Sustaining, Patron and James Smithson Society members of the Contributing Membership attended the National Endowment for the Arts' "1986 National Heritage Fellowships Program." Presented at the George Washington University Lisner Auditorium, the program included performances by the master folk artists and artisans chosen as 1986 Heritage Fellows.

September 15-19

Course: As part of the Conservation Analytical Laboratory's conservation training program, a specialist course in the Indentification of Historic Textile Dyes and the Preparation of Analytical Reference Standards was taught by the

leading expert in this field, Dr. Helmut Schweppe of BASF, West Germany. This course, attended by 19 museum professionals was recorded on videotape, from which CAL, jointly with the Getty Conservation Institute, will prepare an educational tape at a later date.

September 17

Lecture: Olga Hirshhorn described her life with her famed benefactor husband, in conjunction with the exhibition "Selections from the Joseph H. Hirshhorn Bequest." The program was cosponsored by the Resident Associate Program and the Hirshhorn Museum and Sculpture Garden.

September 17-20

Workshop: The Office of Museum Programs On-Site Workshop "Collections: Planning and Management," cosponsored by the Office of Museum Programs and the Hawaii Museums Association, sent a Smithsonian Institution team to Honolulu.

September 20

Special Event: As part of an ongoing effort to strengthen ties between museums and schools across the United States, the Office of Elementary and Secondary Education conducted a regional workshop in Shreveport, Louisiana, serving more than 400 teachers from the area, including nearby Arkansas and Texas.

September 23

Milestone: The exhibition "Milestones: 50 Years of Consumer Goods and Services" opened at the Cooper-Hewitt Museum to extensive national broadcast coverage, including ABC's "Good Morning America," and coverage in the New York Times.

September 23-24

Special Program: "Pulse: A Practicum on Current Ideas and Approaches in Museum Education" was held at the Hirshhorn Museum and Sculpture Garden. The two-day symposium featured lectures and workshops for docents.

September 25

Exhibition Award: The Office of Horticulture was awarded second-place honors at the 38th Orchid Congress for orchid display, first place for an educational exhibition and first, second and third place awards for orchid photographs.

September 26-27

Special Event: The annual weekend for members of the James Smithson society included a formal dinner to honor members of the Society and the National Board of the Smithsonian Associates, a behind-the-scenes tour of the Supreme Court, followed by a luncheon at the John F. Kennedy Center for the Performing Arts.

September 30

Exhibit Film: The epilogue film for the Museum of American History exhibition "Engines of Change" was completed by the Office of Telecommunications.

Appendix 1

Members of the Smithsonian Council, Boards, and Commissions, September 30, 1986

SMITHSONIAN INSTITUTION BOARD OF REGENTS

Honorable Warren E. Burger, Chief Justice of the United States, ex officio, Chancellor (until September 26)

Honorable William H. Rehnquist, Chief Justice of the United States, ex officio, Chancellor (from September 26)

Honorable George H. W. Bush, Vice President of the United States, ex officio

Honorable Edwin J. (Jake) Garn, Senator from Utah Honorable Barry Goldwater, Senator from Arizona Honorable James R. Sasser, Senator from Tennessee

Honorable Edward P. Boland, Representative from Massachusetts Honorable Silvio O. Conte, Representative from Massachusetts Honorable Norman Y. Mineta, Representative from California

Honorable David C. Acheson, citizen of the District of Columbia Honorable Anne L. Armstrong, citizen of Texas Dr. William G. Bowen, citizen of New Jersey Mrs. Jeannine Smith Clark, citizen of the District of Columbia Dr. Murray Gell-Mann, citizen of California Honorable A. Leon Higginbotham, Jr., citizen of Pennsylvania Honorable Carlisle H. Humelsine, citizen of Virginia Mr. Samuel C. Johnson, citizen of Wisconsin Mr. Barnabas McHenry, citizen of New York

SMITHSONIAN COUNCIL

Neil Harris
Chairman
Dore Ashton
Paul Fussell
Stephen Jay Gould
Christian C. Hohenlohe
Thomas P. Hughes
Ada Louise Huxtable
Alice S. Ilchman
Oliver O. Jensen
Bennetta Jules-Rosette
Sherman E. Lee
Thomas E. Lovejoy

Peter R. Marler
Robert M. May
Matthew S. Meselson
Sidney W. Mintz
Arthur Mitchell
Frederick W. Mote
David F. Musto
Jaroslav J. Pelikan
Peter H. Raven
Carl E. Schorske
Emily D. T. Vermeule
Dave Warren

JOINT SPONSORING CONFETTIE FOR THE PAPERS OF JOSEPH HENRY

Frederick Seitz, Chairman
Robert LoC. Mars
Thitfield J. Fell, Jr.
David Challinor
Charles Gillispie
Jean R. St. Clair
Henry D. Smyth (deceased September 11, 1986)

ARCHIVES OF AMERICAN ART BOARD OF TRUSTEES

Mrs. Otto L. Spaeth, Honorary Chairman

Mr. A. Alfred Taubman, Chairman

Mr. Joel S. Ehrenkranz, President

Mrs. Nancy B. Wellin, Vice President

Mrs. Robert F. Shapiro, Vice President

Mr. Irvin A. Levy, Vice President

Mr. Dave H. Williams, Vice President/Treasurer

Mrs. Dana M. Raymond, Secretary

Miss Caroline R. Alexander

Mrs. Eli Broad

Mr. Eli Broad

Mrs. Francis de Marneffe

Mrs. George C. Dillon

Mrs. Ahmet M. Ertegun

Mrs. Walter B. Ford II

Mr. Benjamin D. Holloway

Mrs. Henry C. Johnson

Mrs. Dwight M. Kendall

Mrs. Charles Kessler

FOUNDING TRUSTEES

Mr. Lawrence A. Fleischman

Mr. Edgar P. Richardson (deceased)

Mrs. Edsel B. Ford (deceased)

EX OFFICIO

Mr. Robert McC. Adams

Mr. Tom L. Freudenheim

Mr. Gilbert H. Kinney

Mr. Howard W. Lipman

Mr. Richard Manoogian

Mrs. Donald B. Marron

Mr. Alexander R. Mehran

Miss Julienne Michel

Mrs. Muriel Kallis Newman

Mrs. John Rosekrans, Jr.

Mr. Richard Jay Schwartz

Mr. C. Bagley Wright

HONORARY TRUSTEES

Dr. Irving F. Burton

Mr. Russell Lynes

Mrs. William L. Richards

ARCHIVES OF AMERICAN ART ADVISORY COMMITTEES

WASHINGTON, D.C.

Bernard Mergen, Chair
Marjory Balge
Lorraine Brown
David Driskell
Alan Fern
Lois Fink
Henry Glassie
William Homer
Charles F. Hummel
Mark J. Pachter
John Vlach
John Wilmerding

NEW YORK

Milton Brown, Chair Thomas N. Armstrong John I. H. Baur John Dobkin Anne d'Harnoncourt Linda S. Ferber William Gerdts Lloyd Goodrich Eugene Goossen John Howat James Humphry III John A. Kouwenhoven Russell Lynes Porter McCray Barbara Novak Clive Phillpot Jules D. Prown William B. Walker

NEW ENGLAND

Harley P. Holden, Chair Winslow Ames David S. Brooke Georgia Bumgardner Robert Cardinale Theresa Cederholm Anne Farnam Charles Ferguson Wolfgang Freitag Hugh Gourley Elton W. Hall Patricia Hills Sinclair Hitchings John Holverson John Kirk Elizabeth M. Kornhauser William Lipke Laura C. Luckey Paul Master-Karnik Elliot Offner James O'Gorman Ronald Onorato Stephen Riley Daniel Rosenfeld David Ross Theodore Stebbins Susan Strickler Katharine Watson Peter A. Wick Margret Craver Withers

NORTHERN CALIFORNIA

Herschel Chipp, Chair Graham Beal Whitney Chadwick Wanda Corn John Dillenberger James Elliott Albert Elsen Henry Hopkins Harvey Jones Connie Lewallen Margaretta Lovell Christina Orr-Cahall Moira Roth Peter Selz Marc Simpson Donald L. Stover Ian McKibbin White

SOUTHERN CALIFORNIA

Constance Glenn, Chair
E. Maurice Bloch
Ruth Bowman
Bram Dijkstra
Beatrice Farwell
Burton Fredericksen
Richard Koshalek
Susan Larsen-Martin
Ronald Onorato
Earl A. Powell III
Michael Quick
Josine Ianco Starrels
Maurice Tuchman
Susan Walther
Richard V. West

CHICAGO DOCUMENTATION PROJECT

Dennis Adrian Don Baum Courtney Donnell Robert Evans Richard Gray Neil Harris Mary Jane Jacob Judith Kirshner Katharine Lee Maureen McKenna Archibald Motley Franz Schulze David Sokol James Wells Wim de Wit John Zukowsky

CENTER FOR ASIAN ART: ARTHUR M. SACKLER GALLERY
and FREER GALLERY OF ART

Sackler Visiting Committee

Robert McC. Adams, Ex Officio
The Honorable Norman Y. Mineta,
Chairman
Charles Blitzer
Kwang-chih Chang
Cynthia Helms

Porter A. McCray
The Honorable George C. McGhee
Henry Millon
Cynthia Polsky
Edith Porada
Mrs. Arthur M. Sackler

Freer Visiting Committee

Robert McC. Adams, Ex Officio
The Honorable Norman Y. Mineta,
Chairman
Laurence Sickman, Vice-Chairman
Mrs. Jackson Burke
Kwang-chih Chang
Marvin Eisenberg

Katharine Graham
Porter McCray
John Rosenfield
Hugh Scott
Priscilla Soucek
Richard Weatherhead

COOPER-HEWITT MUSEUM ADVISORY COUNCIL

August Heckscher, Chairman Karen Johnson Boyd Rosemary Corroon Joan K. Davidson Joanne du Pont Harmon H. Goldstone Russell Lynes Kenneth Miller Arthur Ross Robert Sarnoff Marietta Tree Robert McC. Adams. ex officio Tom Freudenheim, ex officio

HIRSHHORN MUSEUM AND SCULPTURE GARDEN BOARD OF TRUSTEES

Sydney Lewis, Chairman
Jerome L. Greene, Vice Chairman
Charles Blitzer
Anne d'Harnoncourt
Thomas M. Evans
Daniel P. Moynihan
Robert Rosenblum (appointed July 1, 1986)
A. James Speyer
Leonard C. Yaseen

Robert McC. Adams, ex officio Warren E. Burger, ex officio

NATIONAL AIR AND SPACE MUSEUM ADVISORY BOARD

Robert McC. Adams, Chairman Ann P. Bradley Vice Admiral James C. Irwin, USCG Donald M. Koll Vice Admiral Edward H. Martin, USN

Jacqueline Ponder
Bernard E. Smith, Jr.
Lt. Gen. Keith A. Smith, USMC
Lt. Gen. Louis C. Wagner, Jr., USN
Gen. Larry D. Welch, USAF
Robert E. Whittington

NATIONAL AIR AND SPACE MUSEUM RESEARCH ADVISORY COMMITTEE

Dr. Lew Allen
Professor Luis Alvarez
Dr. Daniel J. Boorstin
Dr. John Brademas
Professor A. Hunter Dupree

Dr. Robert Frosch
Professor Charles Gillispie
Dr. Glenn Seaborg
Professor James Van Allen

Professor Freeman Dyson

NATIONAL MUSEUM ACT ADVISORY COUNCIL

Patti Carr Black
Ellsworth K. Brown
Edmund Barry Gaither
Jane K. Hutchins
Paul Henry Knappenberger
Robert R. Macdonald (ex officio)
Frank Preusser
William N. Richards (ex officio)
Raymond H. Thompson
Bret Waller
Terry Weisser

NATIONAL MUSEUM OF AFRICAN ART COMMISSION

Frank E. Moss, Chairman
Mrs. Frances Humphrey Howard,
Vice-Chairman
David Driskell
John A. Friede
Colbert I. King
Richard Long
Helen Neufeld
Robert Nooter

Mrs. Milton F. Rosenthal
Mrs. Susan Samuels
Gustave Schindler
Michael Sonnenreich
Robert Farris Thompson
Walter Washington
Robert McC. Adams, ex officio
Tom L. Freudenheim, ex officio

NATIONAL MUSEUM OF AMERICAN ART COMMISSION

Mrs. Mary Homans, Chairman David S. Purvis, Vice Chairman

Donald Anderson
Mrs. Elizabeth Brooke Blake
Thomas S. Buechner
Mrs. Johnson Garrett
Ms. Nancy Graves
R. Philip Hanes, Jr.
Walker Hancock
Bartlett H. Hayes, Jr.
August Heckscher
Mr. Thomas C. Howe
Mrs. Jaquelin Hume

Robert McC. Adams, ex officio James T. Demetrion, ex officio Lloyd Goodrich, Commissioner Emeritus R. Crosby Kemper, Jr.
Myron Kunin
Mrs. Nan Tucker McEvoy
Charles Parkhurst
Mrs. John D. Rockefeller IV
Wilbur L. Ross
Mrs. Oliver Seth
Mrs. John Farr Simmons
Mrs. Otto L. Spaeth
Mrs. Bagley Wright

Richard Hunt

NATIONAL PORTRAIT GALLERY

Commission

Senator Jake Garn (Chairman)
Robert O. Anderson
Barry Bingham, Sr.
Michael Collins
Thomas Mellon Evans
W. John Kenney
R. W. B. Lewis
Katie Louchheim
Robert L. McNeil, Jr.
Senator Robert H. Morgan
Barbara Novak
Frank Stanton

J. Carter Brown, Director, National Gallery of Art, ex officio Warren E. Burger, Chief Justice of the United States, ex officio Robert McC. Adams, Secretary, Smithsonian Institution, ex officio

HORTICULTURE ADVISORY COMMITTEE

James R. Buckler, Belva Jensen Carlton Lees
Chairman
Orchid Subcommittee

Edward S. Ayensu James R. Buckler Paul E. Desautels

Mary L. Ripley

OFFICE OF MUSEUM PROGRAMS NATIONAL ADVISORY COMMITTEE

W. K. Kellogg Foundation Project

William N. Richards,
Chairman (through January 1986)
Tom L. Freudenheim,
Chairman (from February 1986)

Jane R. Glaser, ex officio Janet W. Solinger, ex officio

Mary Schmidt Campbell Ralph C. Rinzler
David De La Torre Michael H. Robins
Alan M. Fern Susan Stitt
J. O. Grantham Michael Templeton

Philip S. Humphrey
Abram Lerner
William F. McSweeny
Paul N. Perrot
Richard H. Randall, Jr.
Ralph C. Rinzler
Michael H. Robinson
Susan Stitt
Michael Templeton

FOLKLIFE ADVISORY COUNCIL

Adrienne Kaeppler, Chairman
Roger Abrahams
Richard Bauman
Douglas Evelyn
Henry Glassie
Rayna Green
John Langston Gwaltney

Charlotte Heth
Ivan Karp
William Merrill
Bernice Johnson Reagon
Roy Seiber
John Tchen
Carlos Velez-Ibanez

SMITHSONIAN INSTITUTION WOMEN'S COUNCIL

Carolyn Jones
Chairperson
Mary Combs
Vice-Chair
Lauranne Nash
Secretary
Katherine Sprague
Treasurer
Kathleen Baxter
Historian
Diana Cohen
Montrose Cones
Lori Dempsey

Debora Fletcher
Carole Fox
Shadia Habbal
Vera Hyatt
Susan Jewett
Susan Kalcik
Christine Louton
Judith Petroski
Margaret Santiago
Joanna Scherer
Ellen Sprouls
Susan Warner

SMITHSONIAN INSTITUTION INTERNSHIP COUNCIL

Vicki Avera Co-Chairperson July 1985-June 1986 Term Ann Noel
Staff Assistant
to the Council

Eileen Hall Co-Chairperson January_1986-December 1986

Term

Magda Schremp Co-Chairperson July 1986-June 1987 Term

Ray Branham Linda Chick Pat Chieffo Sal Cilella Bruce Craig Zed David Georgina de Alba William Deiss Betty Beuck Derbyshire Kathy Dorman Mary Dyer Erica Ell Shirley Epps Zora Felton William Gaske James Goode Eileen Hall Nancy Hinton Judith Houston Harry Jackson Gretchen Jennings

Mark Katz

Peter Kibbee Betty Lathern Edward Lawson Trish Long Tom Lowderbaugh Eleanor McMillan Carolyn Mills Lauranne Nash Anne Peret Alan Postlethwaite Jacki Rand Argelis Roman Magda Schremp Marjorie Share Gayle Southworth Neil Spitzer Barbara Strickland Marge Turgel Carolyn Walker Wilcomb Washburn Rick Yamada Ken Yellis

NATIONAL BOARD OF THE SMITHSONIAN ASSOCIATES

Mr. Seymour H. Knox III, Chairman

Mrs. Joe L. Allbritton

Mr. Arthur G. Altschul

Mr. Philip Anschutz

Mr. Perry R. Bass

Honorable Lucius D. Battle

Mr. George B. Bingham, Jr.

Mr. William W. Boeschenstein

Mrs. I. Townsend Burden

Mr. Frank T. Cary

Mr. James H. Clement

Mr. Jeffrey Cole

Mr. Charles D. Dickey, Jr.

Mrs. Robert Donner, Jr.

Mr. Marshall Field

Mr. W. L. Hadley Griffin

Mr. Gerald D. Hines

Mr. S. Charles Kemp

Mr. Thomas M. Keresey

Mr. Howard M. Love

Mr. Brooks McCormick

Mr. Alexander K. McLanahan

Mr. Arjay Miller

Mr. Charles H. Murphy, Jr.

Mr. Jack S. Parker

Mr. Sidney R. Petersen

Mr. Charles W. Schmidt

Mrs. George M. Seignious II

Mrs. Edson W. Spencer

Mr. Malcolm T. Stamper

Mrs. James M. Walton

Honorable John C. Whitehead

Mr. J. Tylee Wilson

Mrs. Peter Wray

Honorary Members

Mr. William S. Anderson

Mr. Richard P. Cooley

Mr. Joseph F. Cullman III

Honorable Leonard K. Firestone

Mr. Alfred C. Glassell, Jr.

Mr. Lewis A. Lapham

Honorable George C. McGhee

Justice Sandra D. O'Connor

Mr. S. Dillon Ripley

Mr. Francis C. Rooney, Jr.

Mr. Merritt Kirk Ruddock

Honorable Thomas J. Watson, Jr.

WOMEN'S COMMITTEE OF THE SMITHSONIAN ASSOCIATES

Chairman

Vice Chairman

Secretary

Assistant Secretary

Treasurer

Assistant Treasurer

Mrs. David Acheson

Mrs. Daniel Antonoplos

Mrs. Albert Barclay, Jr.

Mrs. Denton Blair

Mrs. Adelyn Breeskin

Mrs. George Bush

Mrs. Joseph V. Charyk

Mrs. Frank Clay

Mrs. Robert Collier

Mrs. Stuart C. Davidson

Mrs. J. Edward Day

Mrs. Adrian Fisher

Mrs. Sydney J. Freedberg

Mrs. George C. Gerber

Mrs. Karl G. Harr, Jr.

Mrs. Parker T. Hart

Mrs. Edgar W. Holtz

Mrs. Donald W. Jeffries

Mrs. Godfrey W. Kauffmann

Mrs. Clinton W. Kelly, III

Mrs. Robert Koehler

Mrs. Henry Krieger

Mrs. Nevin Kuhl

Mrs. George Varick Lauder

Mrs. James Lehrer

Mrs. Bruce MacLaury

Mrs. William Mailliard

Mrs. Alexander M. Maish

Mrs. Henry Rowmer McPhee

Mrs. Avery Faulkner

Mrs. Robert Rogers

Mrs. W. Jerrold Scoutt

Mrs. Thomas Crocker

Mrs. Harold Snell

Mrs. Thomas Taylor

Mrs. James Mitchell

Mrs. Sam Nunn

Mrs. Dudley Owen

Mrs. Richard R. Palmer

Mrs. James R. Patton, Jr.

Mrs. Charles H. Percy

Mrs. Horace White Peters

Mrs. Richard Powell

Mrs. Malcolm Price

Mrs. S. Dillon Ripley

Mrs. Thomas M. Roberts

Kirby Rodriguez

Mrs. Frederick B. Rooney

Mrs. Peter T. Russell

Mrs. John T. Sapienza

Mrs. Leonard Silverstein

Mrs. Henry P. Smith, III

Mrs. Guy Steuart

Mrs. Potter Stewart

Mrs. Mark Sullivan, III

Mrs. Richard L. Thompson

Mrs. Robert D. van Roijen

Mrs. Charles Verrill

Mrs. John Voorhees

Mrs. Charles Weber

Mrs. Edwin M. Wheeler

Mrs. T. Ames Wheeler

Mrs. Gordon Page Williams

Mrs. Laurence I. Wood

Board of Trustees

Honorary Chairmen

Mrs. Ronald Reagan

Mrs. Richard M. Nixon

Mrs. Jimmy Carter

Mrs. Lyndon B. Johnson

Mrs. Gerald R. Ford

Mrs. Aristotle Onassis

Officers

Roger L. Stevens, Chairman
Senator James A. McClure, Vice Chairman
Henry Strong, Vice Chairman
Frank Ikard, Secretary
Charlotte Woolard, Assistant Secretary
Timothy C. Coughlin, Treasurer
Harry C. McPherson, Jr., General Counsel
William Becker, Associate Counsel
Richard H. Owens, Henry Strong, Assistant Treasurers

Members Appointed by the President of the United States

Joe L. Allbritton
Mrs. Howard H. Baker, Jr.
Marshall B. Coyne
Richmond Crinkley
Trammell Crow
June Oppen Degnan
Robert Fryer
Mrs. Joseph B. Gildenhorn
Mrs. William Lee Hanley, Jr.
Charlton Heston
Mrs. Earle Jorgensen
Melvin R. Laird
Marjorie M. Lawson
Mrs. J. Willard Marriott
Dina Merrill

Joan Mondale
Gerald M. Rafshoon
Mrs. Abraham Ribicoff
Caroline Hunt Schoellkopf
Leonard L. Silverstein
Jean Kennedy Smith
Roger B. Smith
Dennis Stanfill
Roger L. Stevens
Mrs. Theodore H. Strauss
Henry Strong
Lew R. Wasserman
Mrs. Jack Wrather

Members Ex Officio Designated by Act of Congress

Otis R. Bowen, Secretary of Health and Human Services William J. Bennett, Secretary of Education
Charles Z. Wick, Director, U.S. Information Agency
Senator Edward M. Kennedy
Senator Lowell Weicker, Jr.
Senator James A. McClure
Representative Joseph M. McDade

Representative Charles Wilson
Representative Sidney R. Yates
Marion S. Barry, Mayor, District of Columbia
Robert McC. Adams, Secretary, Smithsonian Institution
Daniel J. Boorstin, Librarian of Congress
J. Carter Brown, Chairman of the Commission of Fine Arts
William Penn Mott, Jr., Director, National Park Service
F. Alexis H. Roberson, Director, District of Columbia Department of
Recreation

Honorary Trustees

Mrs. Albert Lasker Ralph E. Becker Mrs. Jouett Shouse Mrs. J. Clifford Folger J. William Fulbright

FRIENDS OF THE KENNEDY CENTER

Annette G. Strauss, Chairman Thomas J. Mader, Executive Director

National Council

Alexander Armstrong Gayle Perkins Atkins Joy Dirksen Baker Mabel Brandon William L. Cotter, Jr. Geoffrey Edwards Russell Lindner Floretta Dukes McKenzie Dina Merrill Michael X. Morrell Jock Reynolds John Safer Caroline Hunt Schoellkopf Carol Schwartz Norma Davis Smith Roger L. Stevens Henry Strong Joy Carter Sundlun David Waller Togo D. West, Jr.

JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

1986 Corporate Fund Leadership

Chairman

James E. Burke

Chairman

Johnson & Johnson

Vice Chairmen Stephen J. Bechtel, Jr.

Chairman

Bechtel Group

Robert A. Beck

Chairman

Prudential Insurance

Theodore F. Brophy

Chairman

GTE

Charles L. Brown Former Chairman

T & TA

John L. Clendenin

Chairman

BellSouth

Lodwrick M. Cook

Chairman

Atlantic Richfield

Donald F. Craib, Jr.

Chairman, Retired

Allstate

John J. Creedon

President

Metropolitan Life Insurance Chairman

Thomas H. Cruikshank

Chairman

Halliburton

James L. Ferguson

Chairman

General Foods

John H. Gutfreund

Chairman

Salomon Inc

John R. Hall Chairman Ashland Oil

Robert A. Hanson

Chairman

Deere & Company

Edward L. Hennessy, Jr.

Chairman

Allied-Signal

William R. Howell

Chairman

J. C. Penney

Edward G. Jefferson

Finance Committee

Chairman

DuPont

David T. Kearns

Chairman

Xerox

James L. Ketelsen

Chairman

Tenneco

Charles F. Knight

Emerson Electric

Howard M. Love

Chairman

National Intergroup

John G. McElwee

Chairman

John Hancock Mutual

Life Insurance

J. W. McLean Chairman Banks of Mid-America

Ruben F. Mettler Chairman TRW

Jack Moseley Chairman USF & G Corporation

Allen E. Murray Chairman Mobil

John R. Opal Chairman, Executive Committee IBM

Edmund T. Pratt, Jr. Chairman Pfizer

James D. Robinson III Chairman American Express

Andrew C. Sigler Chairman Champion International

Leonard L. Silverstein Senior Partner Silverstein and Mullens

Roger B. Smith Chairman General Motors

John F. Welch, Jr. Chairman General Electric

Thomas H. Wyman Former Chairman CBS

Secretary

Harold Burson Chairman Burson-Marsteller

PRESIDENT'S ADVISORY COMMITTEE ON THE ARTS

Herbert L. Hutner, California Chairman

Margaret Archambault, Illinois Robert D. Bain, North Dakota Joy S. Burns, Colorado Charles A. Camalier, Jr., Maryland Claire Chambers, Michigan Margot Denny, Alaska Ophelia De Vore-Mitchell, New York Mollie Faison, North Carolina William M. Fine, New York Richard A. Gallun, Wisconsin Beverly J. Gosnell, South Carolina Carl Halvorson, Oregon Leota Hayes, Mississippi T. David Higgins, West Virginia Stephen Jernigan, Oklahoma Peggy Mallick, Wyoming Alyne Massey, Tennessee Julia M. McCabe, Delaware Virginia McCann, New Jersey Millicent L. Monks, Maine Julie P. Montgomery, Georgia Lindsay, J. Morgenthaler, Ohio Lillian N. Nall, Nevada

Jeannette Nichols, Kansas Betty Noe, Louisiana Kay Orr, Nebraska John G. Pappajohn, Iowa Ann S. Penberthy, Arizona John Piercey, Utah Millie Pogna, New Mexico Gladys Prescott, Florida Chesley Pruet, Arkansas Ann Rydalch, Idaho Hugh K. Schilling, Minnesota William Siems, Montana Harriet Slaybaugh, Vermont Eileen Slocum, Rhode Island Charles C. Spalding, Hawaii Richard Taylor, District of Columbia Dr. Paul Tessier, New Hampshire James Thompson, Kentucky Judith Thompson, Alabama G. Robert Truex, Jr. Washington Diane Ushinski, Pennsylvania Dorothy Vannerson, Texas Joseph Vetrano, Connecticut Judith Woods, Missouri Naomi Zeavin, Virginia

NATIONAL GALLERY OF ART BOARD OF TRUSTEES

Franklin D. Murphy, Chairman John R. Stevenson Carlisle H. Humelsine Ruth Carter Stevenson Robert H. Smith

Jim Nelson, South Dakota

Warren E. Burger, Chief Justice of the United States, ex officio

George P. Shultz, Secretary of State, ex officio

James A. Baker, III, Secretary of the Treasury, ex officio

Robert McCormick Adams, Secretary, Smithsonian

Institution, ex officio

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

Board of Trustees

William J. Baroody, Jr. Chairman Robert A. Mosbacher Vice Chairman Robert McC. Adams James A. Baker III Theodore C. Barreaux Daniel J. Boorstin Otis R. Bowen Frank G. Burke Lynne V. Cheney Kenneth B. Clark Stuart E. Eizenstat Gertrude Himmelfarb Max M. Kampelman Jesse H. Oppenheimer George P. Schultz Charles Z. Wick

Appendix 2

Smithsonian Special Foreign Currency Program Awards Made October 1, 1985, through September 30, 1986

ARCHEOLOGY, ANTHROPOLOGY, AND RELATED DISCIPLINES

American Academy of Arts and Sciences, Cambridge, Massachusetts. Development conference for special <u>Daedalus</u> issue on India.

American Institute of Indian Studies, Chicago. Illinois. Continued support for administration; research fellowships; Center for Art and Archeology; Archives and Research Center for Ethnomusicology.

American Sociological Association, Washington, D.C. XI World Congress of Sociology (India).

Baltimore Museum of Art, Baltimore, Maryland. Ritual arts of the Baga (Guinea).

Boston University, Boston, Massachusetts. Indo-U.S. conference on the Indian economy.

Evergreen State College, Olympia, Washington. Comparative study of crop production in India.

Freer Gallery of Art, Washington, D. C. Mughal gardens in Pakistan.

Harvard University, Cambridge, Massachusetts. Epigraphic study of Sogdian and other remains from Gilgit and the Karakorum in Pakistan.

Hunter College, New York, New York. Archeological strategies for Moenjodaro in Pakistan.

Indo-U.S. Subcommission on Education and Culture, New York, New York. Indo-American fellowship program.

National Museum of Natural History, Washington, D. C. Geophysical exploration at Moenjodaro, Pakistan.

Smithsonian Office of Folklife Programs, Washington, D. C. Folklife research (Pakistan); el-Sebou: the birth ritual of Egypt.

Social Science Research Council, New York, New York. Conference on agricultural terminologies (India).

Tufts University, Boston, Massachusetts. Conference on South Asia and world capitalism.

University of California, Berkeley, California. Excavations at Opovo-Bajbuk (Yugoslavia); archeological investigations at Harappa, Pakistan; energy technologies and society in rural India.

University of California, Los Angeles, California. International conference on the 100th anniversary of the Congress Party of India.

University of Hawaii, Honolulu, Hawaii. Gender inequalities in rural north India.

University of Minnesota, Minneapolis, Minnesota. Cooperative field and laboratory archeological investigations (India)

University of Pennsylvania, Philadelphia, Pennsylvania. Hellenistic and Roman influences on the ceramics of India; multidisciplinary exchanges program with University of Peshawar, Pakistan.

University of Wisconsin, Madison, Wisconsin. Conference on old problems and new perspectives in the archeology of South Asia (India).

SYSTEMATIC AND ENVIRONMENTAL BIOLOGY (INCLUDING PALEOBIOLOGY)

Auburn University, Auburn, Alabama and College of William and Mary, Williamsburg, Virginia. VI International Congress of Aracology (India).

Eastern Washington University, Cheney, Washington. Paleontology and carbonate petrology of the Permian-Lower Triassic strata of the Salt, Surghar, and Khisor ranges of Pakistan.

Harvard University, Cambridge, Massachusetts. Later Miocene hominoids and the origins of hominidae (Pakistan).

National Museum of Natural History, Washington, D. C. Distributional and ecological studies of relictual avian populations on the Indian peninsula; international symposium on grass systematics and evolution (India); international conference on marine science in the Arabian Sea (Pakistan).

National Zoological Park, Washington, D. C. Genetic analyses of captive lions (India); Indian environmental science congress; snow leopard conference (India).

New York University, New York, New York. The snakes of Burma (Burma and India).

Northern Illinois University, DeKalb, Illinois. Study of early Cenozoic and older Siliceous microfossils

Ohio State University, Columbus, Ohio. Ecology of a semitropical monsoonal wetland in India; 3rd international congress on environmental education.

Pennsylvania State University, University Park, Pennsylvania. A comparative study on the old workd and new world tiger beetle community structure (India).

Rust College, Holly Springs, Mississippi. Nodulating plants of Pakistan.

Smithsonian Tropical Research Institute, Balboa, Panama. Coraciiform avifauna of India.

University of Houston, Houston, Texas. Plumage patterns and speciation in the avian genus "Phylloscopus" (India).

University of Illinois, Urbana, Illinois. Systematic analysis of honey bees (India).

University of Massachusetts, Boston, Massachusetts. Chemical and mechanical communication in termites (India).

University of Minnesota, St. Paul, Minnesota. Comparative breeding ecology of black-bellied terms of South Asia (India).

University of North Carolina, Morehead City, North Carolina. Sharks and their potential use as a food resource (India).

University of North Dakota. Reproductive biology and conservation of the mugger crocodile (India).

Utah State University, Logan, Utah. Generic limits in the Stipeae: the tapa of India and Pakistan.

ASTROPHYSICS AND EARTH SCIENCES

Louisiana State University, Baton Rouge, Louisiana. Geochemical and geochronological studies of selected flood basalt provinces of India; facies characteristics of the modern depositional environments of the east coast of India deltaic complexes.

National Air and Space Museum, Washington, D. C. Late Quaternary geochronology (Egypt).

University of Rhode Island, Narragansett, Rhode Island. Possible environmental impact of Deccan basalts volcanism at the Cretaceous/Tertiary boundary (India).

MUSEUM PROGRAMS

Carnegie Museum of Natural History, Pittsburgh, Pennsylvania. Exchange of museum personnel with the Pakistan Museum of Natural History.

Indo-U.S. Subcommission on Education and Culture, New York, New York. Joint programs (India).

Northwest Institute for Historic Preservation, Pullman, Washington. Stabilization and rehabilitation of historic monuments (Burma).

Appendix 3

National Museum Act Grants Awarded in Fiscal Year 1986

GRADUATE/PROFESSIONAL EDUCATION AND TRAINING

New York State Historical Association, Cooperstown, New York New York University, New York, New York Southern Illinois University, Carbondale, Illionis State University of New York, Cooperstown, New York University of Delaware, Newark, Delaware University of Michigan, Ann Arbor, Michigan

MUSEUM INTERNSHIPS

Cincinnati Art Museum, Cincinnati, Ohio Harris County Heritage Society, Houston, Texas Harvard University, Cambridge, Massachusetts Historic Deerfield, Deerfield, Massachusetts Intermuseum Conservation Association, Oberlin, Ohio Missouri Botanical Garden, St. Louis, Missouri Museum of Fine Arts, Boston, Massachusetts New York Botanical Garden, Bronx, New York New York Zoological Society, Bronx, New York North Carolina Museum of Art, Raleigh, North Carolina Northeast Document Conservation Center, Andover, Massachusetts Panhandle-Plains Historical Museum, Canyon, Texas Pennsbury Society, Morrisville, Pennsylvania Riverbanks Zoological Park, Columbia, South Carolina Rochester Museum and Science Center, Rochester, New York St. Louis Zoological Park, St. Louis, Missouri University of California, Los Angeles, California University of Pennsylvania, Philadelphia, Pennsylvania Walker Art Center, Minneapolis, Minnesota

SEMINARS

Association of Science-Technology Centers
Dubuque County Historical Society, Dubuque, Icwa
Museum of New Mexico, Santa Fe, New Mexico
National Trust for Historic Preservation, Washington, D.C.
Pacific Regional Conservation Center, Honolulu, Hawaii
Virginia Association of Museums, Richmond, Virginia

SERVICES TO THE FIELD

African American Museums Association, Washington, D.C.
American Association for State and Local History, Nashville, Tennessee
American Association of Museums, Washington, D.C.
National Institute for the Conservation of Cultural Property,
Washington, D.C.
Strong Museum, Rochester, New York

SPECIAL STUDIES AND RESEARCH

American School of Classical Studies, New York, New York Carnegie-Mellon University, Pittsburgh, Pennsylvania North Carolina State University, Raleigh, North Carolina Winterthur Museum, Winterthur, Delaware

STIPENDS TO INDIVIDUALS FOR CONSERVATION STUDIES

Sergio Cautino, United States/International Council on Monuments and Sites, Washington, D.C.

Scott Fulton, Queen's University, Ontario, Canada
Lisa Goldberg, New York University, New York, New York

Jeffrey C. Kimball, University of London, London, England

Dana Moffett, University of Iondon, London, England

Joseph Orfant, United States/International Council on Monuments and Sites, Washington, D.C.

Terri Schindel, University of London, London, England

Mary Scott, University of London, London, England

Jane Sugarman, Winterthur Museum, Winterthur, Delaware

Vallentine Talland, State University of New York, Cooperstown, New York

Ralph Wiegandt, State University of New York, Cooperstown, New York

Appendix 4

Academic, Research Training, and Internship Appointments in Fiscal Year 1986

Listed immediately below in the first section of this Appendix under the heading "Academic and Research Training Appointments" are Predoctoral and Postdoctoral fellows, Graduate Student fellows, Visiting Scientists or Scholars, and other special awardees and participants in special programs. This list was compiled by the Office of Fellowships and Grants. Interns and other appointees are listed in the second section under the heading "Internships and Other Student Appointments." These entries were submitted by bureaus, offices, and divisions of the Smithsonian Institution and may contain some duplication. Also listed in this section are interns placed by the Office of Museum Programs.

ACADEMIC AND RESEARCH TRAINING APPOINTMENTS

The Smithsonian offers, through the Office of Fellowships and Grants, research appointments to visiting scientists, scholars, and students. The appointees are provided access to the Institution's facilities, staff specialties, and reference resources. The awardees, listed in this Appendix by bureau, office, or division, began their residencies between October 1, 1985 and September 30, 1986. Predoctoral and Postdoctoral fellows, Graduate Student fellows, Visiting Scientists or Scholars, and other special awards and participants in special programs are so listed. The entries include the institution where the Fellow received or expects to receive the degree, or the home institution of the Visiting Scientist or Scholar and other special appointees. A brief description of the project to be undertaken at the Smithsonian is included where appropriate. The fellow's or visitor's host bureau or office and the Smithsonian advisor are also listed.

ARCHIVES OF AMERICAN ART

Jontyle Robinson, Faculty Fellow, Emory University. Archibald John Motley

Jr. and his artistic milieu with Garnett McCov, Archives of American Art,
from February 1 to May 31, 1986.

BARNEY STUDIO HOUSE

Kenneth Haltman, Graduate Student Fellow, Yale University. The role of the interpreter: treaty councils on the 19th-century frontier with Wilcomb Washburn, from June 16 to August 22, 1986.

CONSERVATION ANALYTICAL LABORATORY

- Nancy Benco, Postdoctoral Fellow, State University of New York,
 Binghamton. Compositional and technological variability: an approach
 to the study of pottery specialization in ancient societies with
 Jacqueline Olin and James Blackman, from February 1, 1986 to January
 31, 1987.
- Ann Boulton, Postgraduate Conservation Intern, State University of New York, Buffalo. Object conservation with Carol Grissom from September 15, 1986 to September 14, 1987.
- Veletta Canouts, Visiting Scientist, Southern Illinois University. Hopi social boundary maintenance and exchange relationships, AD 1300-1600 with Ronald Bishop, from September 15, 1986 to September 14, 1987.
- Robert M. Ehrenreich, Postdoctoral Fellow, Oxford University, England. The state of iron technology in Roman dominated Britain with Jacqueline Olin and Roy Clarke, Department of Mineral Sciences, from October 1, 1985 to December 31, 1986.
- Rosemary Gianno, Wenner-Gren Postdoctoral Fellow, Yale University.

 The analysis of identification of Southeast Asian resins with David von Endt, from February 1, 1986 to January 31, 1987.
- Rita Wright, Visiting Scientist, Harvard University. <u>Production and distribution of ceramics in Middle Asia</u>, with James Blackman, from June 16 to August 15, 1986.

CENTER FOR ASIAN ART FREER GALLERY OF ART ARTHUR M. SACKLER GALLERY

- James Wescoat, Rockefeller Postdoctoral Fellow, University of Chicago. 'In gardens watered by running streams': the meanings of water in Mughal Gardens at Agra with Milo Beach, from April 1 to September 15, 1986 and June 16 to September 16, 1987.
- Joseph Thompson, Webb Fellow, University of Pennsylvania. The Vever Collection with Glenn Lowry. from June 2 to August 29, 1986.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

- Maria Bartko-Singh, Postdoctoral Fellow, University of Poznan, Poland.

 The aesthetic theory of Erwin Panofsky with Phyllis Rosenzweig,

 Department of Painting and Sculpture, from March 1, 1986 to February
 28, 1987.
- Patricia McDonnell, Graduate Student Fellow, Brown University. Americans in Berlin before World War I: Oscar Bluemner, Charles Demuth, Lyonel Feininger, Marsden Hartley with Judith Zilczer, Department of Painting and Sculpture, from June 2 to August 8, 1986.
- Rebecca Zurier, Predoctoral Fellow, Yale University. The graphic art of the Ashcan School with Judith Zilczer, Department of Painting and Sculpture, from June 1, 1986 to April 30, 1987.

JOSEPH HENRY PAPERS

Margaret Champlin, Graduate Student Fellow, University of California, Los Angeles. Rapael Pumpelly, geologist of the Gilded Age with Nathan Reingold, from February 17 to April 11, 1986.

NATIONAL AIR AND SPACE MUSEUM

- John D. Anderson, Jr., Charles A. Lindbergh Professor of Aerospace History,
 University of Maryland, College Park. <u>Definitive history of aerodynamics</u>
 and research in hypersonic aerodynamics with Walter Boyne, Director,
 and Howard Wolko, Department of Aeronautics, from September 1, 1986 to
 August 31, 1987.
- Glenn Bugos, Predoctoral Fellow, University of Pennsylvania. Testing the F-4 Phantom II: engineering practice in the development of American military aircraft, 1952-1972 with E. Timothy Wooldridge, Department of Aeronautics, from September 1, 1986 to August 31, 1987.
- Michael Dennis, Predoctoral Fellow, The Johns Hopkins University. New relations: academic-military relations at the Johns Hopkins

 University Applied Physics Lab and the MIT Instrumentation Lab.

 1942-1952 with David DeVorkin, Space Science and Exploration

 Department, from September 1, 1986 to August 31, 1987.
- Louis R. Eltscher, Alfred Verville Fellow, Rochester Institute of Technology.

 A history of the Curtiss-Wright aeronautical corporation with F. Robert van der Linden, Department of Aeronautics, from September 1, 1986 to August 31, 1987.
- Herbert Friedman, Martin Marietta Chair of Space History, The Johns Hopkins University. Progress of sounding rocket research centering on the Aerobee rocket era of the 1950's with David DeVorkin, Space Science and Exploration Department, from September 1, 1986 to August 31, 1987.

- Jose Villela Gomez, International Fellow, Universidad Autonoma Nacional de Mexico. Early airlines of Mexico, establishment of the Mexican airline industry, and Mexico's place in aviation history with Ron Davies and Jay Spenser, Department of Aeronautics, from July 1, 1986 to June 30, 1987.
- Pierre Lissarrague, Charles A. Lindbergh Professor of Aerospace History.

 Experimental flight at the very beginning of aviation and characteristics of aircraft flown before 1910 with Walter Boyne, Director, and Ron Davies, Department of Aeronautics, from October 1, 1985 to September 30, 1986.
- Beth Parkhurst, Graduate Student Fellow, Brown University. History of women in the computer programming profession with Paul Ceruzzi,

 Department of Space Science and Exploration, from June 2 to August 8, 1986.

NATIONAL MUSEUM OF AFRICAN ART

- Renee Boser-Sarivaxivanis, Regents Fellow, University of Basel, Switzerland.

 <u>African textiles, the Lamb Collection</u> with Sylvia Williams and Roy

 <u>Sieber, from October 1, 1985 to August 31, 1986.</u>
- Christraud Geary, Rockefeller Postdoctoral Fellow, Boston University.

 Historical photographs as sources for research on African art history
 and history with Roy Sieber, from September 1, 1986 to August 31, 1987.
- Labelle Prussin, Rockefeller Postdoctoral Fellow, University of Washington.

 Nomadic African women as placemakers: the arts and architecture of

 nomadism in Africa with Sylvia Williams, from January 1 to August 31,

 1986.

NATIONAL MUSEUM OF AMERICAN ART

- Judith Hayward, Predoctoral Fellow, Columbia University. Man and nature in Winslow Homer's Adirondack pictures with Elizabeth Broun, Curatorial Division, and William Truettner, Department of Painting and Sculpture, from September 1, 1986 to June 30, 1987.
- Michael Panhorst, Predoctoral Fellow, University of Delaware. Monumental sculpture dedicated on Civil War battlefields before 1920 with William Truettner and Lois Fink, Department of Painting and Sculpture, from October 1, 1985 to August 31, 1986.
- John Wetenhall, Predoctoral Fellow, Stanford University. The ascendency of modernism in American public sculpture with Virginia Mecklenburg and George Gurney, Department of Painting and Sculpture, from July 1, 1986 to June 30, 1987.

NATIONAL MUSEUM OF AMERICAN HISTORY

JoAnne Brown, Postdoctoral Fellow, University of Wisconsin, Madison. Next to Godliness: the meaning and practice of personal cleanliness in America, 1830-1980 with Barbara Melosh, Department of the History of Science and Technology, from October 15, 1985 to November 30, 1986.

- Richard Bushman, Regents Fellow, University of Delaware. Gentility and respectability, material culture in early America, 1700-1850 with Roger Kennedy, Director, and Gary Kulik, Department of Social and Cultural History, from January 1 to August 31, 1986.
- Bret Carroll, Graduate Student Fellow, Cornell University. Robert Hare's theories of electricity with Arthur Molella, Department of the History of Science and Technology, from June 2 to August 8, 1986.
- Elizabeth Clark-Lewis, Postdoctoral Fellow, University of Maryland, College Park. The migration and employment transition of African-American women, 1890-1930 with Spencer Crew, Archives Center, from September 1, 1986 to August 31, 1987.
- Wayne Durrill, Predoctoral Fellow, University of North Carolina, Chapel Hill. Rural development in the Early New South: Anson County, North Carolina, 1870-1900 with Pete Daniel, Department of the History of Science and Technology, from January 1 to December 31, 1986.
- Edwin Gabler, Postdoctoral Fellow, University of Massachusetts. Social and economic history of late 19th-century American telegraphers with Bernard Finn and Arthur Molella, Department of the History of Science and Technology, from September 1, 1986 to August 31, 1987.
- Paul Groth, Postdoctoral Fellow, University of California, Berkeley. Factory space and "living" space: form and meaning in American industrial buildings, 1870-1930 with Robert Vogel, Department of the History of Science and Technology and Gary Kulik, Department of Social and Cultural History, from February 1 to July 31, 1986.
- Sharon Harley, Faculty Fellow, University of Maryland, College Park. What it means when women work: gender, race, and women's work in the nation's capital, with Spencer Crew and James Horton, Archives Center, from February 2 to June 1, 1986.
- Kenneth Kreitner, Graduate Student Fellow, Duke University. Town bands and community life in turn-of-the-century Pennsylvania with Horace Boyer and Cynthia Hoover, Department of Social and Cultural History, from June 2 to August 8, 1986.
- Alan Lessoff, Graduate Student Fellow, The Johns Hopkins University. The structure of local real estate and contracting business in the District of Columbia during the Gilded Age and the involvement of local entrepreneurs in the District development and party politics with Keith Melder, Department of Social and Cultural History, from February 3 to April 11, 1986.
- Karen Linn, Predoctoral Fellow, Brown University. The American idea of the banjo with John Hasse, Department of Social and Cultural History, from September 1, 1986 to August 31, 1987.
- Charles McGovern, Predoctoral Fellow, Harvard University. The discovery of the consumer, 1880-1940 with Jackson Lears, Department of Social and Cultural History, and Spencer Crew, Archives Center, from September 1, 1986 to August 31, 1987.

- Cynthia Neverdon-Morton, Faculty Fellow, Coppin State College. The

 Afro-American woman and the struggle for racial and social equality

 1925-1975 with Edith Mayo, Department of Social and Cultural History,
 from September 1 to December 31, 1986.
- Rodney Olsen, Postdoctoral Fellow, University of Missouri. The visual culture of civilized morality with Jackson Lears and Susan Myers, Department of Social and Cultural History, from September 1, 1986 to August 31, 1987.
- Frances Robb, Predoctoral Fellow, West Virginia University. Industrialization in the Potomac River Valley, 1800-1860 with William Withuhn,

 Department of the History of Science and Technology, from August 1,

 1986 to July 31, 1987.
- William Wiggins, Faculty Fellow, Indiana University. The role of sports in Afro-American community life during the Jim Crow Era: 1896 to 1954 with Carl Scheele, Department of Social and Cultural History, from July 1 to August 31, 1986.

NATIONAL MUSEUM OF NATURAL HISTORY

- Hans Bath, Visiting Scientist, Forschungs Institut Senckenberg,
 Frankfort, Germany. Examining and identifying a large number of
 parablenniins and other blennioids and fishes with Victor Springer,
 Department of Vertebrate Zoology, from September 1 to September 28, 1986.
- David Begun, Predoctoral Fellow, University of Pennsylvania. The taxonomy and phylogeny of Dryopithecus with Richard Potts, Department of Anthropology, from September 1, 1986 to August 31, 1987.
- Daniel Britt, Graduate Student Fellow, Brown University. The mineralogy and petrology of meteorites with Glenn MacPherson, Department of Mineral Sciences, from June 9 to August 15, 1986.
- James Brittsan, Visiting Student, University of Maryland, College Park.

 Rates of primary production through use of a cold water microcosm with Walter Adey, Marine Systems Laboratory, from April 1, 1986 to March 31, 1987.
- Susan Candela, Visiting Student, University of Miami. <u>Identification of beaks of Pelagic Cephalopods from the Western North Atlantic with Clyde Roper, Department of Invertebrate Zoology, from July 15 to July 31, 1986.</u>
- Ricardo Correa e Castro, Predoctoral Fellow, University of Sao Paulo,
 Brazil. Taxonomic revision of the family Prochilodontidae (Pisces:
 Characiformes) with Richard Vari, Department of Vertebrate Zoology,
 from August 1, 1986 to July 31, 1987.
- Steven Crum, Native American Fellow, University of Utah. The National Congress of American Indians and its involvement in American Indian higher education with Herman Viola, National Anthropological Archives, from June 9 to August 8, 1986.

- Amy Dahlstrom, Postdoctoral Fellow, University of California, Berkeley.

 Obviation in Fox with Ives Goddard, Department of Anthropology, from January 1 to December 31, 1986.
- Kruna Elbied-Rakic, Visiting Scientist, University of Belgrade,
 Yugoslavia. Search for the deep-sea passage formed between the
 Atlantic Ocean and the Mediterranean Sea at the beginning of the
 Pliocene (late Neogene) with Richard Benson, Department of
 Paleobiology, from March 1, 1986 to February 28, 1987.
- Richard Emlet, Postdoctoral Fellow, University of California, Berkeley.

 Studies on developmental mode and its evolutionary consequences in fossil echinoids with David Pawson, Department of Invertebrate Zoology, from October 1, 1985 to September 30, 1986.
- Ronald Engard, Postdoctoral Fellow, Indiana University. Art and political economy: the constitutionality of symbols in African myth, dance, and other "expressive forms" with Mary Jo Arnoldi, Department of Anthropology, from September 1, 1986 to August 31, 1987.
- Omran Frihy, U.S./Egypt Peace Postdoctoral Fellowship, Alexandria
 University, Egypt. Erosion of the eastern Nile delta with Daniel
 Stanley, Department of Mineral Sciences, from April 24, 1986 to
 February 24, 1987.
- Robert Gay, Native American Fellow, New Mexico State University. The Oglala Sioux Tribe from 1890-1934 with Herman Viola, National Anthropological Archives, from July 1 to July 31, 1986.
- Martha Graham, Graduate Student Fellow, University of New Mexico. An ethnoarcheological study of Tarahumara residential site structure and mobility with William Merrill, Department of Anthropology, from September 8 to November 15, 1986.
- Mark Grygier, Postdoctoral Fellow, University of California, San Diego.

 Taxonomy, morphology, and ecological relationships of Myzostomida with Kristian Fauchald, Department of Invertebrate Zoology, from July 1 to December 31, 1986; and May 15 to November 14, 1987.
- Royce Brooks Hanson, Postdoctoral Fellow, University of California, Los
 Angeles. Thermal and metamorphic evolution of the Ritter Range Pendant,
 East-Central Sierra Nevada, California with Sorena Sorenson and
 Richard Fiske, Department of Mineral Sciences, from September 15, 1986
 to September 14, 1987.
- Marian Hansson, Visiting Scholar, University of Oklahoma. The Kiowa collections at the Smithsonian with William Merrill, Department of Anthropology, from April 15, 1986 to April 14, 1987.
- Lawrence Heaney, Postdoctoral Fellow, University of Kansas. Systematics and biogeography of Southeast Asian tree squirrels with Michael Carleton and Richard Thorington, Department of Vertebrate Zoology, from September 1, 1986 to August 31, 1987.

- Alan Herndon, Graduate Student Fellow, Florida International University.

 Preliminary revisionary studies on North American Hypoxis with Robert
 Faden, Department of Botany, from June 2 to August 8, 1986.
- Lesley Hill, Faculty Fellow, University of Massachusetts. Bio-cultural approaches to the study of New World slavery and emancipation with Lawrence Angel, Department of Anthropology from February 1 to May 31, 1986.
- Robert Hook, Postdoctoral Fellow, University of Kentucky.

 Paleoenvironmental controls on the accumulation and preservation of upper carboniferous tetrapod remains with Kay Behrensmeyer, Department of Paleobiology, from January 1 to December 31, 1986.
- Alan Robert Kabat, Visiting Student, Harvard University. Systematics of the Naticidae, a family of predatory marine gastropod mollusks with Richard Houbrick, Department of Invertebrate Zoology, from June 11 to June 20, 1986.
- Silvard Kool, Predoctoral Fellow, George Washington University. Phylogenv and taxonomy of thaidid (Prosobranchia: Muricacea) gastropods with Richard Houbrick, Department of Invertebrate Zoology, from June 1, 1986 to May 31, 1987.
- Varuni Kulasekera, Graduate Student Fellow, University of Peradeniya, Sri Lanka. A new species of Anopheles of the aitkenii species group from Sri Lanka with Karl Krombein, Department of Entomology, from August 4 to October 10, 1986.
- Lars Kvist, Predoctoral Fellow, University of Aarhus, Denmark. The taxonomy and specialization of Kohleria (sensu lato) (Gesneriaceae) with Laurence Skog, Department of Botany, from September 1, 1986 to August 31, 1987.
- Michael Lambert, Graduate Student Fellow, Harvard University. <u>Islam and national identity in Senegal</u> with Ivan Karp, Department of Anthropology, from June 30 to September 5, 1986.
- Ariyawansa N. Liyanage, Graduate Student Fellow, Nagoya University, Japan.

 Minerological and chemical analysis of deep ocean sediments

 with Kurt Fredriksson, Department of Mineral Sciences, from October 2
 to November 28, 1985.
- Karen Lupardus, Postdoctoral Fellow, University of Kansas. Recovery and processing of Alabama (Muskogean language) texts collected by John R. Swanton circa 1910 with Ives Goddard, Department of Anthropology, from June 1, 1986 to February 28, 1987.
- Mark Mack, Education Fellow, University of Massachusetts. Donald Ortner, Department of Anthropology, from September 1, 1986 to August 31, 1987.
- Anne Menne, Graduate Student Fellow, University of California, Los Angeles.

 Movement analysis in selected ethnic film with Mary Jo Arnoldi,

 Department of Anthropology, from June 16 to August 23, 1986.

- James Stuart Miller, Postdoctoral Fellow, Cornell University. A phylogenetic analysis of the dioptine genera (Lepidoptera: Notodontidae) with Robert Robbins, Department of Entomology, from February 15, 1986 to February 14, 1987.
- Sidney Mintz, Regents Fellow, The Johns Hopkins University. The cultural and economic place of sucrose in U.S. History with Robert Hoffman, Director, and Adrienne Kaeppler, Department of Anthropology, from September 1, 1986 to August 31, 1987.
- Dorothy Ann Pabst, Graduate Student Fellow, Duke University. Morphology and possible function of the subdermal connective tissue sheath in cetaceans with James Mead, Department of Vertebrate Zoology, from June 2 to August 8, 1986.
- Michael Pogue, Visiting Scientist, University of Minnesota. Long-term program on canopy Lepidoptera with Terry Erwin, Department of Entomology, from August 1, 1986 to July 31, 1987.
- Carol Robertson, Faculty Fellow, University of Maryland, College Park. The dynamics of power and gender as reflected in Hawaiian performance contexts with Adrienne Kaeppler, Department of Anthropology, from December 12, 1985 to May 30, 1986.
- Susan Rowley, Postdoctoral Fellow, Cambridge University, England.

 Inter-regional population movements and their archaeological
 visibility: a case study among northern hunter-gatherers with William
 Fitzhugh, Department of Anthropology, from November 15, 1985 to
 November 14, 1986.
- Anna Siniarska, Postdoctoral Fellow, Adam Mickiewicz University, Poland.

 Sexual dimorphism and asymmetry of human bones with Donald Ortner,

 Department of Anthropology, from October 1, 1985 to September 30, 1986.
- Bob Smith, Native American Fellow, Long Beach State College. Oneidas, from time of contact through 1934 with Herman Viola, National Anthropological Archives, from February 1 to March 15, 1986.
- Celia Smith, Postdoctoral Fellow, Stanford University. Species concepts in red algae: testing for evolution or phenotypic variation in species of Bostrychia (Rhodomelaceae, Ceramiales) with James Norris, Department of Botany, from January 15, 1986 to January 14, 1987.
- Margaret Stern, Graduate Student Fellow, University of California, Davis.

 Ecology and biogeography of Andean bamboo and its associated fauna with Thomas Soderstrom, Department of Botany, from March 17 to May 23, 1986.
- Hans-Dieter Sues, Postdoctoral Fellow, Harvard University. Patterns of evolution in herbivorous mammal-like reptiles from the Beaufort Group (Permo-Triasic) of southern Africa with Nicholas Hotton, Department of Paleobiology, from August 1, 1986 to July 31, 1987.

- James Thomas, Predoctoral Fellow, Florida Institute of Technology.

 Cladistical analysis of selected tropical gammaridean amphipoda with
 Laurens Barnard, Department of Invertebrate Zoology, from June 1, 1986
 to May 31, 1987.
- Russell Thornton, Native American Fellow, Florida State University. James Mooney: historic American Indian populations and epidemiology with Douglas Ubelaker, Department of Anthropology, from January 1 to February 28, 1986.
- Katherine Troyer, Postdoctoral Fellow, University of California, Davis.

 The evolution of herbivory in terrestial vertebrates with George Zug,

 Department of Vertebrate Zoology, from September 1, 1986 to August 31,

 1987.
- Susan Weller, Predoctoral Fellow, University of Texas, Austin. A revised classification and phylogeny of the Nystaleini (Lepidotera:

 Notodontidae) with Robert Robbins, Department of Entomology, from September 1, 1986 to August 31, 1987.
- Thosaporn Wongratana, Postdoctoral Fellow, University of London, England.

 A revision of phylogeny and taxonomy of Indo-West Pacific clupeoid fishes with Robert Gibbs, Department of Vertebrate Zoology, from October 1, 1985 to September 30, 1986.

NATIONAL PORTRAIT GALLERY

- Dorinda Evans, Senior Postdoctoral Fellow, Emory University. Gilbert
 Stuart: The artist and his influence with Lillian Miller, Charles
 Wilson Peale Papers, from September 1, 1986 to April 30, 1987.
- Tara Tappert, Predoctoral Fellow, George Washington University. Biography of Cecilia Beaux (1855-1942) and a critical analysis of her work with Lillian Miller, Charles Wilson Peale Papers, from July 1, 1986 to June 30, 1987.

NATIONAL ZOOLOGICAL PARK

- G. Agoramoorthy, Visiting Student, University of Jodhpur, India.

 Reproductive strategies of male and female Hanuman Langurs of Jodhpur,

 India with R. Rudran, Department of Zoological Research, from May 1 to
 October 31, 1986.
- Sara Aliga, Visiting Student, University of Ricardo Palma, Peru.

 Conservation and Wildlife Management Training with R. Rudran,

 Department of Zoological Research, from June 2 to August 15, 1986.
- Bharat Bhushan, Visiting Student, University of Bombay, India. Conservation and Wildlife Management Training with R. Rudran, Department of Zoological Research, from June 2 to August 15, 1986.
- Mary Katherine Carlstead, Postdoctoral Fellow, State University of Groningen, Netherlands. Predictability as a factor contributing to the occurrence of cage stereotypies in zoo animals with John Seidensticker, Department of Mammalogy, from September 15, 1986 to September 14, 1987.

- Peter Davidar, Visiting Student, Madras University, India. R. Rudran, Department of Zoological Research, from June 2 to August 15, 1986.
- Kim C. Derrickson, Postdoctoral Fellow, University of Pennsylvania. The experimental use of female mockinghird (Mimus polyglottos) response to assay the effectiveness of male song repertoires of different size and delivery patterns in attracting females with Eugene Morton, from October 15, 1985 to October 14, 1986.
- Pulinkunnel Ease, University of Calicut, India. Conservation and Wildlife

 Management Training with R. Rudran, Department of Zoological Research,
 from June 2 to August 15, 1986.
- Lisa Forman, Visiting Scientist, New York University. <u>Population genetics</u> with Katherine Ralls, Department of Zoological Research, from August 1, 1986 to July 31, 1987.
- Kenneth Halama, Graduate Student Fellow, University of Virginia.

 Differences in salamander species diversity between disturbed and undisturbed habitats with John Seidensticker, Department of Mammalogy, from June 9 to August 15, 1986.
- JoGayle Howard, Predoctoral Fellow, University of Maryland, College Park.

 Xenogenous fertilization of leopard cat (Felis begalensis) oocytes with
 David Wildt, Department of Animal Health, from January 1 to December 31,
 1986.
- Yadvendradev V. Jhala, University of Bombay, India. Conservation and Wildlife Management Training with R. Rudran, Department of Zoological Research, from June 2 to August 15, 1986.
- Subba Manbahadur, Visiting Student. Conservation and Wildlife Management
 Training with R. Rudran, Department of Zoological Research, from
 June 2 to August 15, 1986.
- William McShea, Postdoctoral Fellow, State University of New York,
 Binghamton. Social organization of a fossorial insectivore (Condvlura cristata) with Edwin Gould, Department of Mammalogy, from June 1, 1986 to May 31, 1987.
- Daniel Mughogho, Visiting Student, University of Malawi, Central Africa.

 <u>Conservation and Wildlife Management Training</u> with R. Rudran,

 <u>Department of Zoological Research, from June 2 to August 15, 1986.</u>
- Donald Nichols, Postdoctoral Fellow, Virginia-Maryland Regional College of Veterinary Medicine. Development of immunologic tests to detect

 Parelaphostrongylus tenuis infection in exotic ungulates with Richard Montali, Department of Pathology, from August 1, 1986 to July 31, 1987.
- Enrique Ortiz, Visiting Student, San Marcos State University, Peru.

 Conservation and Wildlife Management Training with R. Rudran, Department of Zoological Research, from June 2 to April 15, 1986.

- Survo W. Prawiroatmodjo, Visiting Student, Airlangga University, Indonesia.

 Conservation and Wildlife Management Training with R. Rudran,

 Department of Zoological Research, from June 2 to August 15, 1986.
- Ramkrishnan Selvakumar, Visiting Student, Madurai-Kamaraj University, India. Feeding ecology and social organization of the Gaur 'Bos Gaurus' with Christen Wemmer, Department of Conservation, from May 1 to October 31, 1986.
- Ram Prit Yadav, Visiting Student. <u>Conservation and Wildlife Management</u>
 <u>Training</u> with R. Rudran, Department of Zoological Research, from June
 2 to August 15, 1986.
- Prospero A. Yance, Visiting Student, Universidad Nacional Agraria La Molina, Peru. Conservation and Wildlife Management Training with R. Rudran, Department of Zoological Research, from June 2 to August 15, 1986.

OFFICE OF FOLKLIFE PROGRAMS

- Edward Ayom, Graduate Student Fellow, City University of New York. A linguistic and pedagogic exegesis of some (Jieng) Dinka tongue twisters, riddles, and song and dance games with Peter Seitel and Ives Goddard, Department of Anthropology, from June 30 to September 5, 1986.
- Francesca Cappelletto, Graduate Student Fellow, University of North Carolina, Chapel Hill. Analysis of the Festival of American Folklife and its ramifications from theoretical perspective with Peter Seitel, from September 15 to November 21, 1986.
- Margaret Wade-Lewis, Faculty Fellow, New York University. Analysis and cataloguing of tapes from the Festival Black Storytelling with Phyllis May-Machunda, from July 1 to August 31, 1986.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

- Johannes Andersen, Visiting Scientist, Copenhagen University, Denmark. Radial velocity measurements on early-type stars and spectroscopic binaries from August 11 to October 30, 1986.
- Lawrence Anderson, Visiting Scientist, University of California, Berkeley.

 Study of the thermal equilibrium of the solar atmosphere from the photosphere to the base of the corona, from July 7 to July 18, 1986.
- Keith Arnaud, Postdoctoral Fellow, Cambridge University, England. Soft x-ray spectra used to study a large sample of clusters, near infrared spectra of old steller populations, and the consequences of cooling flows by using IRAS and Hubble Space Telescope data, from September 1, 1986 to August 31, 1988.

- Alison Campbell, Visiting Scientist, Cambridge University, England.

 Age sequences in giant extragalactic bursts of star formation with

 Steven Willner, Department of Optical and Infrared Astronomy, from May
 15, 1986 to January 31, 1988.
- Hendrik W. DeVries, Visiting Scientist, Columbia University. High latitude molecular clouds associated with infrared emission from IRAS with Patrick Thaddeus, Department of Radio and Geoastronomy, from July 1 to August 31, 1987.
- David Fegun, Visiting Scientist, University College, Dublin, Ireland. High energy astrophysics, from September 1 to October 3, 1986.
- Akihiko Hashimoto, Postdoctoral Fellow, Nagoya University, Japan. Planet forming processes in the solar nebula, with J.A. Wood, Department of Planetary Sciences, from May 1, 1986 to April 30, 1987.
- Philip Judge, Visiting Scientist, Oxford University, England. Calculation of model stellar atmospheres based on sulphur atomic data from July 28 to August 22, 1986.
- Cedric Lacey, National Aeronautics and Space Administration Postdoctoral Fellow, Cambridge University, England. Dissipational galaxy formation, and stellar dynamics with George Field, Department of Theoretical Astrophysics, from July 1, 1986 to June 30, 1987.
- Valerie de Lapparent, Postdoctoral Fellow, University of Paris, France.

 The large-scale distribution of galaxies with Irwin Shapiro, Director, from September 1, 1986 to August 31, 1988.
- Laurence Marschall, Visiting Scientist, University of Chicago. Radial velocities of stars in the Trapezium Cluster in Orion with David Latham and Robert Mathieu, Department of Optical and Infrared Astronomy, from July 1, 1986 to August 31, 1987.
- Brian McBreen, Visiting Scientist, University College, Dublin, Ireland. Star forming regions in the Giant Molecular Clouds, from September 22 to October 11, 1986.
- Birgitta Nordstrom, Visiting Scientist, Stockholm University, Sweden. Radial velocity measurements on early-type stars and spectroscopic binaries, from August 25 to October 31, 1986.
- Lenoid Ozernov, Distinguished Visiting Scientist, Lebedev Physical
 Institute, Moscow. Intergalactic medium, quasars, galaxy formation,
 and other phenomena related to cosmological problems with Irwin
 Shapiro, Director, and George Field, Department of Theoretical
 Astrophysics from July 21, 1986 to July 31, 1988.
- Douglas K. Russell, Visiting Scientist, University of Leicester, England.

 Laboratory infrared spectroscopy of astronomical ions with H.E. Radford,

 Department of Atomic and Molecular Physics, from July 1 to December 31,

- Sankar P. Tarafdar, Visiting Scientist, University of Calcutta, India.

 Interstellar chemistry with A. Dalgarno, Department of Theoretical Astrophysics, from August 27 to September 30, 1986.
- Hans Ungerechts, Visiting Scientist, Bonn University, Germany. CO Survey of the molecular clouds in Perseus, Taurus, and Auriga with Patrick Thaddeus, Department of Radio and Geoastronomy, from August 15 to December 31, 1986.
- P. Venkatakrishnan, Visiting Scientist, Bangalore University, India. The physics of solar magnetic flux-tubes; long baseline optical interferometry with R.W. Noves and Peter Nisenson, Department of Solar and Stellar Physics, from September I to September 30, 1986.
- Ira Wasserman, Visiting Scientist, Cornell University. Elementary particle physics with George Rybicki, Department of Theoretical Astrophysics, from April 1 to June 15, 1986.
- Frank Wilczek, Regents Fellow, University of California, Santa Barbara, with Irwin Shapiro, Director, and staff, from June 15 to August 15, 1986; June 15 to August 15, 1987; and June 15 to August 15, 1988.
- Andrzej Zdziarski, Visiting Scientist, Harvard University. Model of Gamma ray burst sources based on repeated Compton scatterings with Alan Lightman, Department of Theoretical Astrophysics, from May 15 to August 15, 1986.

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

- Hilton Biggs, Visiting Scientist, Purdue University. Renovation of a UVB instrument with Bernard Goldberg and John Sager, Rockville, from June 16 to July 4, 1986.
- Josef Grabowski, Visiting Scientist, Poznan Technical University, Poland.

 Atmospheric pressure effect on photosynthetic energy transfer with

 Elisabeth Gantt, Rockville, from June 1 to November 30, 1986.
- Geoffrey Holmes, Visiting Scientist, University of Cambridge, England.

 Far-red enchancement of stomatal aperture and photosynthesis under simulated natural conditions with William Klein, Rockville, from October 12 to October 26, 1986
- Jitendra Khurana, Postdoctoral Fellow, Delhi University, India. Physiology of flowering of the duckweeds with Charles Cleland, Rockville, from October 1, 1985 to September 30, 1986.
- Mamoru Mimuro, Visiting Scientist, National Institute for Basic Biology, Okazaki, Japan. Chemical modification of energy transfer in photosynthetic antennae with Elisabeth Gantt, Rockville, from August 16 to September 6, 1986.

- Laura Nye, Visiting Student, North Carolina State University. Telemetric analysis of foraging and movement by Callinectes sapidus (Rathbun) with Anson Hines, Edgewater, from May 1, 1986 to April 30, 1987.
- Curtis Robinson, Visiting Scientist, Edinboro State College. Gene regulation of carotenoid biosynthesis in N. crassa with Roy Harding, Rockville, from July 15, 1986 to July 14, 1987.
- Allison Snow, Postdoctoral Fellow, University of Massachusetts. Male and female reproductive success of a woodland orchid, Tipularia discolor with Dennis Whigham, Edgewater, from September 1, 1986 to December 31, 1987; and April 1 to August 31, 1988.
- Mark Southerland, Postdoctoral Fellow, University of North Carolina, Chapel Hill. Behavioral ecology of coexisting generalist ant species with James Lynch, Edgewater, from January 1 to December 31, 1986.
- James Stretch, Postdoctoral Fellow, University of California, Santa Barbara.

 Role of emergent plankton in regulating infaunal patchiness with Anson Hines, Edgewater, from March 1, 1986 to February 28, 1987.
- David Ward, Postdoctoral Fellow, University of East Anglia, Norwich, England.

 Acclimation of photosynthetic carbon reduction and light harvesting to nitrogen stress in Spartina alterniflora, Loisel with Bert Drake, Rockville, from July 1, 1986 to June 30, 1987.
- Fan Jie Zeng, Visiting Scientist, Academia Sinica, Beijing, China.

 Evolutionary relationship of Phycobilisome containing algae with

 Elisabeth Gantt, Rockville, from November 1, 1985 to October 30, 1986.

SMITHSONIAN INSTITUTION ARCHIVES

Su Ge, Graduate Student Fellow, Brigham Young University. U.S. China Policy from Mutual Defense Treaty to Taiwan Relations Act with William Moss, Smithsonian Institution Archives, from June 9 to August 16, 1986.

SMITHSONIAN MARINE STATION AT LINK PORT

- Rudiger Bieler, Postdoctoral Fellow, Universitat Hamburg, West Germany.

 Taxonomy, biology, and ecology of the gastropod family vermetidae in the subtropical Western Atlantic with Richard Houbrick, Department of Invertebrate Zoology, from June 1, 1986 to May 31, 1987.
- Beth Okamura, Postdoctoral Fellow, University of California, Berkeley.

 Partitioning of food resources by bryozoans with Mary Rice, and Alan
 Cheetham, Department of Paleobiology, from November 1, 1985 to
 October 31, 1986.

Kent Saxin-Hammarstrom, Graduate Student Fellow, Duke University.

Structure and ultrastructure of the body wall of Sipuncula and

Echiura, with functional and phylogenetic conclusions with Mary Rice,
from September 1 to November 7, 1986.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

- Thomas Aide, Predoctoral Fellow, University of Utah. The interactions of leaf phenology and insect herbivory with Egbert Leigh, from November 1, 1985 to March 31, 1986 and November 1, 1986 to March 31, 1987.
- Jeffrey Brawn, Visiting Scientist, Northern Arizona University. The relationship between anthropod abundance and avian community structure in tropical forests, with James Karr, from January 20, 1986 to March 15, 1987.
- Edward Allen Herre, Predoctoral Fellow, University of Iowa. The implications of reproductive allocation patterns for the coevolution of figs and fig pollinating wasps with Egbert Leigh and Donald Windsor, from March 10 to July 10, 1986 and January 1 to August 30, 1987.
- Emilio Herrera, Postdoctoral Fellow, Oxford University, England. Social behavior and ecology of the Panamanian Capybara with Nicholas Smythe, from August 1, 1986 to July 31, 1987.
- Jerome Howard, Postdoctoral Fellow, University of Iowa. Effects of recruitment and resource quality on persistence of leaf-cutting ants (Atta) with Stephen Hubbell, from January 1 to December 31, 1986.
- Kaoru Kitajima, Graduate Student Fellow, University of Illinois.

 Comparative study of photosynthetic and growth characteristics of neotropical tree seedlings with Alan Smith, from May 27 to August 1, 1986.
- Sonia Ortega, Noves Postdoctoral Fellow, University of South Carolina.

 Distribution and abundance of rocky intertidal organisms on the

 Caribbean coast of Panama with Jeremy Jackson, from September 1 to

 November 30, 1986.
- Raymond Peterson, Faculty Fellow, Howard University. Salinity tolerance assessments of the mangrove ferns Acrostichum aureum and A. danaefolium of Panama with Alan Smith, from June 1 to July 31, 1986.
- Guadalupe Williams-Linera, Noyes Predoctoral Fellow, University of Florida. Tropical edge vegetation and the effect of proximity to the edge on forest structure with Alan Smith and James Karr, from September 1, 1986 to August 31, 1987.
- Janie Wulff, Postdoctoral Fellow, Yale University. Sponge-feeding fishes and the distribution, abundance and color of tropical demosponges with Ross Robertson, from March 1, 1986 to February 28, 1987.

INTERNSHIPS AND OTHER STUDENT APPOINTMENTS

The Smithsonian offers internships and other appointments to visiting graduate and undergraduate students. The persons—listed by bureau, office, or division—in this Appendix began their appointments between October 1, 1985 and September 30, 1986. Holders of special awards and participants in special programs are so listed. The institutions attended, the title or a brief description of the project undertaken, where appropriate, and the name of the Smithsonian supervisor are given for each of the interns.

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

- Anneta Argyres, B.S. Candidate, Brown University. Two spects of benthic patchiness in the Rhode River Estuary, with Dr. Anson Hines, from February 10, 1986 through May 16, 1986.
- Beth Bachur, B.S., University of Maryland. <u>Tidal exchange of nutrients by brackish marshes</u>, with Dr. Dennis Whigham, from March 10, 1986 through August 1, 1986.
- Nancy Bretz, Volunteer Research Assistant, B.S. Mills College. The use of stable isotopes for the study of nutrient dynamics, with Dr. David Correll, from July 28, 1986 through September 30, 1986.
- Sybil Carrere, Volunteer Research Assistant, University of California at Irvine. Estuarine ecology and physiological and psychological aspects of stress, with Dr. Anson Hines, from March 1, 1986 through February 28, 1987.
- Kristin Churchill, B.S. Candidate, University of Wisconsin at Madison. An interpretation of otoliths to determine age of Fundulus, with Dr. Anson Hines, from June 2, 1986 through August 22, 1986.
- John Craig, B.S. Towson State University. <u>Temporal patterns of fish abundances in Muddy Creek</u>, with Dr. Anson Hines, from February 10, 1986 through May 16, 1986.
- Carla Daniels, B.S. Candidate, Jacksonville University. <u>Dry deposition versus</u> acid rain leaching from the forest canopy, with Dr. David Correll, from June 16, 1986 through August 22, 1986.
- Mary D'Imperio, Volunteer Research Assistant, <u>Bamboo Physiology</u>, with Dr. Gerald Deitzer, from October 1, 1985 through September 31, 1986.
- David Edelman, B.S. Candidate, University of Maryland. <u>Bamboo Physiology</u>, with Dr. Gerald Deitzer, from October 1, 1985 through July 31, 1986
- Gina Gore, Volunteer Research Assistant. Population and community ecology of estuarine invertebrates and fish, with Dr. Anson Hines, from May 1, 1986 through August 15, 1986.
- James Harbage, M.S. Candidate, Univeristy of Maryland. Effects of light on rooting in plant tissue cultures, with Dr. Gerald Deitzer, from October 1, 1985 through September 31, 1986.
- Suzanne Hill, B.S. Candidate, Towson State University. Edaphic factors contributing to the zonation of salt marsh species, with Dr. Dennis Whignam, from June 2, 1986 through August 22, 1986.
- Robert M. Perez, Volunteer Research Assistant, Chase Manhattan Bank. Population and community ecology of estuarine invertebrates and fish, with Dr. Anson Hines, from September 1, 1986 through September 15, 1986.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Program in Tropical Biology

Thomas Mitchell Aide, Predoctoral Fellowship, University of Utah. The Interaction of Leaf Phenology and Insect Herbivory, with Dr. Egbert Leigh, from October 1, 1985 through March 31, 1987.

Victor Apanius, Graduate Student Fellowship, University of Pennsylvania. Incidence of Blood and Intestinal Parasitism in an Insular Avifauna, with Dr. Joseph Wright, from April 6, 1987 through June 12, 1987.

Brian Bock, Postdoctoral Fellowship, University of Tennessee. The Effects of Gene Flow Barriers on the Differentiation of <u>Anolis limifrons</u> Subpopulations in Panama, with Dr. Joseph Wright, from July 15, 1985 through September 30, 1986.

Jeffrey Brawn, Visiting Scientist, Northern Arizona University. The Relationship Between Arthropod Abundance and Avian Community Structure in Tropical Forests, with Dr. James R. Karr, from January 20, 1986 through March 15, 1987.

William Davis, Postdoctoral Fellow, University of Texas at Austin. Evolution of Sex Roles and Mating Strategies in New World Kingfishers, with Dr. Martin Moynihan, from December 1, 1986 through November 30, 1987.

Philip DeVries, Predoctoral Fellowship, University of Texas at Austin. Mutualistic Interactions between Ants, Hostplants, Parasitoids and Two Species of Riodinid Butterflies, with Dr. Donald Windsor, from September 1, 1985 through August 31, 1986.

Theodore Dudley, Postdoctoral Fellow, University of Cambridge, England. Kinematics and Ecology of Flight in Butterflies, with Dr. Donald Windsor, from January 1, 1987 through December 31, 1987.

Edward Allen Herre, Predoctoral Fellowship, University of Iowa. The Reproductive Biology of Figs and Fig Pollinating Wasps, with Drs. Donald Windsor and Egbert Leigh, from March 10, 1986 through August 30, 1987.

Emilio Herrera, Postdoctoral Fellowship, Oxford University. Social Behavior and Ecology of the Panamanian Capybara, with Dr. Nicholas Smythe, from August 1, 1986 through July 31, 1987.

Kevin Hogan, Postdoctoral Fellow, University of Illinois. The Effect of Sunflecks on the Growth and Survival of Tropical Tree Seedlings, with Dr. Alan Smith, from October 1, 1986 through September 30, 1987.

Jerome Howard, Postdoctoral Fellowship, University of Iowa. Effects of Recruitment and Resource Quality on Persistence of Leaf-Cutting Ants (Atta), with Dr. Stephen Hubbell, from January 1, 1986 through December 31, 1986.

Dominique Irvine, Postdoctoral Fellow, Stanford University. Regional Variation in Native Resources Management Practices in the Ecuatorian Amazon, with Dr. Olga Linares, from March 1, 1987 through August 31, 1983.

Kaoru Kitajima, Graduate Student Fellowship, University of Illinois. Comparative Study of Photosynthetic and Growth Characteristics of Neotropical Tree Seedlings on Barro Colorado Island, with Dr. Alan Smith, from May 26, 1986 through August 5, 1986.

Raymond Leo Petersen, Visiting Faculty Fellow, Howard University. Salinity Tolerance Assessments of the Mangrove Ferns <u>Acrostichum aureum</u> and <u>A. danaefolium</u> of Panama, with Dr. Alan Smith, from June 2, 1986 through August 1, 1986.

Hugh P. Sweatman, Postdoctoral Fellow, Macquarie University. Predatory Behaviour of some Coral Reef Fishes: a Field Study, with Dr. Ross Robertson, from February 1, 1987 through January 31, 1988.

Janie Lea Wulff, Postdoctoral Fellowship, Yale University. Sponge-Feeding Fishes and the Distribution, Abundance and Color of Tropical Demosponges, with Dr. Ross Robertson, from March 10, 1986 through March 9, 1987.

Other Visiting Scholars

George Angehr, Short-Term Visitor, University of Colorado. Forest Structure in Madagascar, with Dr. Egbert Leigh, from October 1, 1985 through October 27, 1985.

Anthony Coates, Short-Term Visitor, George Washington University. Ecological and Evolutionary Effects of the Closure of the Central American Isthmus on Corals and Coral Reefs, with Dr. Jeremy Jackson, from December 1, 1985 through January 30, 1986.

Carlon Mark Eakin, Short-Term Visitor, University of Miami. The Importance of Damselfish Territorial Aggression on Sea Urchin Bioerosion at El Niño Perturbed Coral Reefs, with Dr. Peter Glynn, from January 8, 1986 through January 20, 1986.

Robert Fleischer, Short-Term Visitor, University of Hawaii. Host Use by the Brood-Parasitic Giant Cowbird, with Dr. Neal Smith, from March 1, 1986 through April 15. 1986.

Ann Foster, Short-Term Visitor, University of Iowa. Growth and Phenotypic Plasticity in Two Families of Reef Corals, with Dr. Jeremy Jackson, from August 1, 1986 through August 22, 1986.

Mary Hagedorn, Short-Term Visitor, Cornell University. Social Communication: Plasticity of Sexually Dimorphic Electric Signals in South American Electric Fish, with Dr. James Karr, from January 1, 1986 through January 31, 1986.

Gilbert Neal Hocker, Short-Term Visitor, University of California, Santa Barbara. Environmental, Biochemical and Genetic Factors Controlling the Reproduction and Recruitment of Panamanian Reef Corals and Associated Fauna, with Drs. Jeremy Jackson and Nancy Knowlton, from April 1, 1986 through April 22, 1986.

Alison Jolly, Short-Term Visitor, Rockefeller University NY. Forest Structure in Madagascar, with Dr. Egbert Leigh, from October 23, 1985 through October 30, 1985.

Hans Malicky, Short-Term Visitor, Biologische Station Lunz, Austria. Ecology and Distribution of Tropical Biotopes of Aquatic Insects, with Dr. Hindrik Wolda, from February 6, 1986 through March 25, 1986.

Immants G. Priede, Short-Term Visitor, University of Aberdeen, United Kingdom. Use of Ultrasonic Transmitters as Means of Monitoring the Cardiac Rate and Electro-Cardiograms of the Sea Snake <u>Pelamis platurus</u>, with Dr. Ira Rubinoff, from March 23, 1986 through March 13, 1986.

Robert F. Stallard, Short-Term Visitor, Princeton University. Weathering and Nutrient Cycling at Barro Colorado Island and the Tropics, with Dr. Egbert Leigh, from April 7, 1986 through June 7, 1986.

Other Fellowship Programs

Heinz Enrique Brucher, Senior Sabbatical, Centro Regional de Investigacion Cientifica, Argentina. Useful Plants of Neotropical Origin, with Dr. Gilberto Ocana, from June 1, 1986 through August 31, 1986.

Gonzalo Castro, Noyes Predoctoral Fellow, University of Pennsylvania. Latitudinal Gradient in the Daily Energy Expenditure of the Sanderling (<u>Calidris alba</u>), with Dr. Neal Smith, from November 23, 1986 through February 15, 1988.

Rosendo Fraga, Senior Sabbatical, University of California, Santa Barbara. Behavioral Ecology of Tropical Icterines, with Dr. Neal Smith, from October 18, 1986 through April 13, 1986.

Sonia Ortega, Noyes Postdoctoral Fellowship, University of South Carolina. Distribution and Abundance of Rocky Intertidal Organisms on the Caribbean Coast of Panama, with Dr. Jeremy Jackson, from September 1, 1986 through December 1, 1986.

Guadalupe Williams-Linera, Noyes Predoctoral Fellowship, University of Florida. Tropical Forest Edge Vegetation and the Effect of Proximity to the Edge on Forest Structure, with Drs. Alan Smith and James Karr, from August 1, 1986 through August 1, 1987.

Short-Term Fellowships in Tropical Biology

Jaime Cavelier, Short-Term Fellowship, Universidad de los Andes, Colombia. Relaciones Hídricas en Especies de un Bosque Nublado y un Bosque Húmedo Estacional, with Drs. Alan Smith and Egbert Leigh, from August 17, 1986 through September 30, 1986.

Timothy Collins, Short-Term Fellowship, Yale University. Evolution of Amphi-American Gastropod Cognates, with Dr. Jeremy Jackson, from January 2, 1986 through April 1, 1986.

Eric E. Gonzalez, Short-Term Research Grant, California State University, Long Beach. The Quantitative Seasonal Fluctuations of Abundance, Diversity and Distribution of Soft-Bottom Intertidal Fauna of the Bay of Panama, with Dr. Jeremy Jackson, from June 28, 1986 through July 25, 1986.

Hector Guzman, Short-Term Fellowship, University of Costa Rica. Changes in the Diet of Arothron meliagris in the Western Pacific, with Dr. Ross Robertson, from July 24, 1986 through December 24, 1986.

Preston Hardison, Short-Term Fellowship, University of Washington. Environmental Control of Sex Allocation in the Androdiocious Lantern Bass, Serranus baldwini, with Dr. Ross Robertson, from November 15, 1985 through March 15, 1986.

Susan Harrison, Short-Term Fellowship, University of California, Davis. Host Plant Relations and Within Seasonal Population Dynamics of <u>Zunacetha annulata</u> on <u>Hybanthus prunifolia</u>, with Dr. Henk Wolda, from June 25, 1986 through August 7, 1986.

Linden Higgins, Short-Term Fellowship, University of Texas. Environmental Factors Affecting Individual Behaviors and Population Dynamics of Orb-Web Spider, Nephila clavipes, with Dr. Henk Wolda, from March 9, 1986 through June 6, 1986.

Audrey Liese, Short-Term Fellowship, University of Vermont. The Impact of Soil Parasites on the Establishment of <u>Calophyllum longifolium</u> Seedlings, with Dr. Joseph Wright, from July 16, 1986 through October 15, 1986.

Robin Manasse, Short-Term Fellowship, University of California. Variation in Seed Size and Fertilization in <u>Crinum erubescens</u> (Amaryllidaceae), with Dr. Joseph Wright, from August 4, 1986 through November 16, 1986.

Carole McIvor, Short-Term Fellowship, University of Virginia. Stegastes leucostictus Relative Abundance and Distribution: the Role of Competition, with Dr. Ross Robertson, from October 1, 1986 through January 1, 1987.

Veselin Miscovic, Short-Term Fellowship, Edvark Kardelj University. Las Interacciones Iconograficas y Estilisticas entre la Ceramica y la Orfebreria de la Baja Centroamerica: Aproximacion Historica-Artistica, with Dr. Richard Cooke, from November 17, 1985 through February 17, 1986.

Paul Rich, Short-Term Fellowship, Harvard University. Hemispherical Photographic Techniques for Assessing Forest Understory Light Environment, with Dr. Alan Smith, from November 25, 1985 through April 10, 1986.

Eugene Schupp, Short-Term Fellowship, University of Iowa. Ecological Consequences of Variable Reproduction in <u>Faramea occidentalis</u>, with Dr. Egbert Leigh, from May 15, 1986 through August 14, 1986.

Kyle Summers, Short-Term Fellowship, University of Michigan. Mating and Parental Behavior in the Poison Arrow Frog, <u>Dendrobates auratus</u>, with Dr. Nancy Knowlton, from June 2, 1986 through August 30, 1986.

Ethel M. Villalobos, Short-Term Fellowship, University of California, Los Angeles. Variation in Provisioning Tactics among Females Stictia heros (Hymenoptera: Sphecidae), with Dr. William Eberhard, from January 1, 1987 through March 31, 1987.

William Wcislo, Short-Term Fellowship, University of Kansas. The Social Behavior and Nesting Biology of Tropical Halictid Bees, with Drs. William Eberhard and Mary Jane West-Eberhard, from December 1, 1985 through May 15, 1986.

Exxon Fellowship & Assistantship Program

Pablo Acuña, Exxon Assistantship, University of Costa Rica. Illustrated Flora of Seedlings of Panamanian Tropical Moist Forest, with Special Emphasis on Barro Colorado, with Dr. Nancy Garwood, from March 15, 1986 through June 7, 1986.

Jesus Alemancia, Exxon Fellowship, University of Panama. La Colonizacion Campesina de la Selva Tropical del Darien y su Repercusion en las Comunidades Indigenas, with Dr. Olga F. Linares, from February 15, 1986 through August 15, 1987.

Onel A. Arias, Exxon Fellowship, Universidad de Panama. Analisis Hidrografico del Rio Carti Dumat, Kuna Yala, with Dr. James Karr, from August 15, 1986 through February 15, 1987.

Ricardo Caicedo, Exxon Fellowship, Universidad de Panama. Distribucion y Aspectos Taxonomicos de los Moluscos Marinos del Archipielago de Las Mulatas, Kuna Yala (continuation of study), with Dr. Harilaos Lessios, from March 1, 1986 through August 31, 1986.

Ada Ruth Castillo O., Exxon Assistantship, Universidad Mayor de San Marco, Peru. The Reproductive Biology and Breeding Structure of Erythrina costaricensis, with Dr. Lyn Loveless, from September 10, 1986 through December 10, 1986.

Belgis Chial, Exxon Assistantship, University of Panamá. Ecology and Larval Biology of Symbiotic Shrimp Species, with Dr. Nancy Knowlton, from May 19, 1986 through August 19, 1986.

Fernando Cornejo, Exxon Assistantship, Universidad Nacional Agraria La Molina, Peru. Litterfall Study on Barro Colorado Island, with Dr. Joseph Wright, from December 11, 1985 through May 3, 1986.

Silvia Farrugia, Exxon Assistantship, Universidad de Panama. Temporal Dynamics and Interaction of Tropical Frugivores and their Fruit Plants, with Dr. Thomas Martin, from February 17, 1986 through May 9, 1986.

Yolanda Betsabe Figueroa, Exxon Fellowship, Universidad de Panama. Dispersion Natal de la Especie Tropical de Ruiseñor <u>Troglodytes aedon</u>, with Drs. Neal Smith and Leonard Freed, from November 15, 1985 through March 15, 1986.

Carlos Alberto Gomez, Exxon Assistantship, Akademia Rolnicza, Poland. Study of the Impact of Soil Parasites on the Establishment of Calophyllum longifolium Seedlings, with Audrey Liese and Dr. Joseph Wright, from August 8, 1986 through October 31, 1986.

Adela Grimaldo, Exxon Assistantship, Universidad de Panama. Study of Temporal Patterns of Larval Recruitment, with Dr. Ross Robertson, from February 24, 1986 through May 20, 1986.

Manuel Guariguata, Exxon Assistantship, Universidad Simon Bolivar, Venezuela. Responses of Understory Herbs to Environmental Fluctuations, with Dr. Alan Smith, from June 2, 1986 through August 1, 1986.

Tomás Gutierrez, Exxon Assistantanship, Universidad de Panama. Rionid Butterfly Larvae and Ant Associations, with Dr. Philip DeVries, from March 10, 1986 through October 1, 1987.

Allan Heres, Exxon Assistantship, Oregon State University. Study of Temporal Patterns of Larval Recruitment, with Dr. Ross Robertson, from February 3, 1986 through February 28, 1986.

Santiago Madriñan, Exxon Assistantship, Universidad de Los Andes, Colombia. Sex Change in the Orchid, Catasetum viridiflavum, with Jess Zimmerman, from June 2, 1986 through November 30, 1986.

Julian Monge, Exxon Fellowship, Universidad de Costa Rica. Defense of Perching Microhabitat by Hamadryas Butterflies (Nymphalidae: Nymphalinae), with Dr. Donald Windsor, from December 14, 1985 through February 15, 1986.

Graciela Palacios, Exxon Fellowship, Universidad de Panama. Distribución y Aspectos Taxonómicos de las Algas Chlorophytas Macroscópicas en el Archipiélago de Las Mulatas, with Dr. John Cubit, from February 15, 1986 through August 15, 1986.

Diogenes Riley, Exxon Assistantship, Universidad de Panama. Population Ecology of Terrestrial Insectivorous Eirds of Tropical Forests, with Kathryn Sieving, from July 1, 1986 through August 12, 1986.

Gustavo Rodriguez, Exxon Assistanship, Universidad Simon Bolivar, Venezuela. Colonization of New Iguana Nesting Sites, with Dr. Brian Bock, from April 21, 1986 through July 21, 1986.

Zoila Romero, Exxon Assistantship, Universidad de Guayaquil, Ecuador. Measurement of Localized Larval Dispersal in a Complex of Alpheid Shrimp Species Symbiotically Associated with Caribbean Anemone Bartholomea annulata, with Dr. Nancy Knowlton, from August 11, 1986 through November 11, 1986.

Myozotis I. Ryfkogel, Exxon Fellowship, Universidad de Panama. Dispersion Natal de la Especie Tropical de Ruiseñor <u>Troglodytes aedon</u>, with Drs. Neal Smith and Leonard Freed, from November 15, 1985 through June 30, 1986.

Belis Serrano, Exxon Fellowship, Universidad de Panama. Composición Química de Mieles Producidas por <u>Apis mellifera adansonii</u>, with Dr. César Villarreal, from November 30, 1986 through August 28, 1986.

Gonzalo Tapia, Exxon Assistantship, Universidad de Panamá. Studies on Shellfish Consumed by Pre-Columbian Populations in the Bay of Parita, with Dr. Richard Cooke, from February 17, 1986 through May 9, 1986.

Anabel Tatis, Exxon Assistantship, Pontificia Universidad Javeriana, Colombia. Experimental Exploration of the Mortality of the Lizard Anolis Limifrons, with Dr. Robin Andrews, from June 23, 1986 through August 15, 1986.

Marcos Tem, Exxon Assistantship, Universidad de Panama. Composición Química de Mieles Producidas por <u>Apis mellifera adansonii</u>, with Dr. Cesar Villarreal, from November 1, 1986 through August 28, 1986.

Isabel Urreiztieta, Exxon Assistantship, Universidad Central de Venezuela. The Population Biology of <u>Acropora cervicornis</u>, with Dr. Nancy Knowlton, from January 15, 1986 through April 15, 1986.

Ivan Valdespino, Exxon Fellowship, Universidad de Panama. Estudio Sistemático de los Helechos de Cerro Jefe, with Prof. Mireya Correa, from June 1, 1986 through December 1, 1986.

Volunteers

Claudia Alderman, worked for Dr. Stephen Hubbell for four months. Laura Majors, worked for Dr. Harilaos Lessios for two months. Laurie Sanders, worked for Dr. Stephen Hubbell for eight months.

CENTER FOR ASIAN ART: ARTHUR M. SACKLER GALLERY and FREER GALLERY OF ART

Sabra Feldman, University of Michigan Fellow, M.A. candidate, University of Michigan. "Japanese Textiles: The Smithsonian's Perry Expedition's Japanese Textiles," with Ann Yonemura and Louise A. Cort, January 15 through June 26, 1986.

Mary Martin, Smithsonian Intern, B.A. candidate, Sarah Lawrence College, "Internship in Museum Studies," with Susan Bliss and Linda Merrill, June 16 through August 29, 1986.

James Thompson, Smithsonian Webb Fellow, Ph.D. candidate, University of Pennsylvania. "Vever Collection," with Dr. Glenn Lowry, June 1 through August 23, 1986.

James Wescoat, Rockefeller Foundation Resident Fellowship in the Humanities, Assistant Professor of Geography, University of Chicago. "In Gardens Watered by Running Streams: The Meanings of Water in Mughal Gardens at Agra," April 1 through September 16, 1986.

Richard Wilson, Smithsonian Post-doctoral Fellow, Rice University. "Ceramics, Calligraphy and Painting of Ogata Kenzan," with W. Thomas Chase, Louise A. Cort and Ann Yonemura, June 30, 1985 through May 23, 1986.

CONSERVATION ANALYTICAL LABORATORY

- Nancy Benco, Ph.D., Postdoctoral Fellow in Material Analysis, SUNY at Binghamton, NY. Composition Technologist Variability: An approach to the study of pottery specialization an ancient society, with Jacqueline S. Olin and M. James Blackman, from February, 1986 through January, 1987.
- Lynn Brostoff, Conservation Intern, New York University, Work and Study in Paper Conservation, with Timothy J. Vitale and Dianne van der Reyden, from September 15, 1986 to August 15, 1987.
- Ann Boulton, Postgraduate Conservation Intern, State University College at Buffalo, NY., Art Conservation Department. Special Projects in Objects Conservation, with Carol A. Grissom, from September 15, 1986 through September 15, 1987.
- Veletta Canouts, Ph.D., Visiting Scholar, Southern Illinois University.

 Hopi Social Boundary Maintenance and Exchange Relationships, AD:

 1300-1600, with Ronald L. Bishop, from September 1, 1985 thorugh
 August 31, 1987.
- Robert Ehrenreich, Ph.D., Postdoctoral Fellow in Materials Analysis,
 Oxford University, United Kingdom, The state of iron technology in
 Roman dominated Britain, with Jacqueline S. Olin and Roy S. Clarke,
 Jr., from October 1, 1985 through December 31, 1986.
- Rosemary Gianno, Ph.D., Wenner-Gren Postdoctoral Fellow, Yale University, New Haven, CT. The Analysis of Identification of Southeast Asian Resins, with David Von Endt, from February 1, 1986 through January 31, 1987.

- Lisa Goldberg, Conservation Intern, Institute of Fine Arts, New York
 University, Work and Study in Objects Conservation, with Carol A.
 Grissom, from January 1, 1986 to June 30, 1986.
- Susan Hobbs, Ph.D., Research Associate, Cornell University at Ithaca, NY.

 Neutron induced Augo Radiology of Paintings by Thomas Wilmer

 Dewing, with Y. Cheng, from October, 1983 through October, 1986.
- Elsje Jenssen, Conservation Intern, Tapestry Conservator, Ovdenaarde, Belgium. Civil War Flags Preservation Project, with Mary W. Ballard, from June 30, 1986 through August 22, 1986.
- Diane Kessler, Conservation Intern, University of Alberta, Alberta,
 Canada. Civil War Flag Preservation Project, with Mary W. Ballard,
 from June 30, 1986 through September 5, 1986. The Identification
 of Dyes on Historic Textiles; The Preparation of Standard Dyeings,
 with Mary W. Ballard and David Von Endt, from September 8, 1986
 through September 19, 1986.
- Vassilis Kilikoglou, Ph.D., Visiting Scientist, International Atomic Energy Agency Fellow, Demokritos, Greece. Work and Study in the Field of Analytical Chemistry, with Edward V. Sayre from October, 1985 to April. 1986.
- Teresa Knutson, Visiting Conservator, <u>Disperse Dyes for Textile</u>

 <u>Conservation</u>, with Mary W. Ballard, from May 12, 1986 to May 16, 1986.
- Sophie Mery, Pre-Doctoral Visiting Scientist, Université de Paris, France. Ceramic Production in the Oman Penisula from the perpective of Capital Hili, with M. James Blackman, from May, 1986 to June, 1986.
- Emlen Myers, Ph.D., Research Collaborator, SUNY at Binghamton. Neutron activation analysis of Italian Majolica from the Sackler Collection, with M. James Blackman, from June, 1986 through May, 1987.
- Jane E. Sugarman, Conservation Intern, University of Delaware, Art Conservation Department. Work and Study in Paper Conservation, with Timothy J. Vitale and Dianne van der Reyden, from September 15, 1985 through August 15, 1986.
- Elizabeth Tait, Conservation Intern, University of Toronto, Ontario, Canada. <u>Natural Dyeing Research Project</u>, with Mary W. Ballard, from June 9, 1986 through August 15, 1986.
- Lisa Thorson, Conservation Intern, University of Nebraska, Natural Dyeing Research Project, with Mary W. Ballard, from June 9, 1986 through August 15, 1986.
- Rita Wright, Ph.D., Research Associate, Harvard University, Cambridge, MA. Production and Distribution of Ceramics in Middle Asia, with M. James Blackman, from October 19, 1985 through October 19, 1988.

Ameen, Souhad, M.A. candidate, Virginia Commonwealth University. Work and study in the Registrar's Office, with Cordelia Rose, from August 30 1985 to October 31, 1985.

Baskerville, Jennifer, SI Minority Fellowship, B.A. Candidate, Smith College. Work and study in the Registrar's Office, with Cordelia Rose, from June 9, 1986 to August 15, 1986.

Bell, Jennifer, B.A. Candidate, Carnegie Mellon. Work and study in the Special Events Office, with Elizabeth Hall, from June 9, 1986 to August 15, 1986.

Bellard Anna, John L. Miller North Senior High. Work and study in the Library and Exhibitions Office, with K. Martinez and D. Glubus, from February 3, 1986 to May 18, 1986.

Fremantle, Christopher, B.A. Candidate, Aberdeen University. Work and study in the Director's Office, with Larry Deemer, from June 11, 1986 through August 15, 1986.

Freudenthal, David, B.A. Candidate, Vassar College. Work and study in the Public Affairs Office, with Arthur Lindo, from June 9, 1986 to August 15, 1986.

Goodspeed, Mary Todd, B.A. Candidate, Connecticut College. Work and study in the Public Affairs Office, with Michele Raphoon, from January 6, 1986 to February 5, 1986.

Hamilton, Timothy, Sidney and Celia Siegel Fellow, B.A. Candidate, Williams College. Work and study in the Exhibitions Office, with Dorothy Globus, from June 9, 1986 to August 15, 1986.

Handelsman, Miriam, Sidney and Celia Siegel Fellow, B.A., Trinity College. Work and study in the Textiles Office, with Ysabella Hincapie, from June 9, 1986 to August 15, 1986.

Hein, Jennifer, M.A. Candidate, Montclair State College. Work and study in the Textile Office, with Ysabella Hincapie, from January 29, 1986 to May 31, 1986.

Lee, Eric, Sydney and Celia Siegel Fellow, B.A. Candidate, Vassar College. Work and study in the Drawings and Prints Office, with Elaine Dee, from June 9, 1986 to August 15, 1986.

Lestage, Julia, B.A. Candidate, Wells College. Work and study in the Drawings and Prints Office, with Elaine Dee, from January 6, 1986 to February 15, 1986.

Loost, Nicola, B.A. Candidate, The American College in Paris. Work and study in the Publications Office, with Nancy Aakre, from June 9, 1986 to August 15, 1986.

Mergler, Julia, B.A. Candidate, Concordia University. Work and study in the Development Office, with George Nichols, from June 9, 1986 to August 15, 1986.

Meyer, Jochen, Berlin, Technische Universitat. Work and study in the Drawings and Prints Office, with Elaine Dee, from February 24, 1986 to April 5, 1986.

Micek, Ann, B.A. Candidate, Rhode Island School of Design. Work and study in the Textile Office, with Lucy Commoner, from June 2, 1986 to August 15, 1986.

Monteleoni, Carol, B.A. Harvard University. Work and study in the Textile Conservation Office, with Lucy Commoner, from January 21, 1986 to September 30, 1986.

Morris, Laura, B.A. Candidate, Washington University. Work and study in the Library, with Kathy Martinez, from June 9, 1986 to August 15, 1986.

Prevost, Catherine, B.A. Candidate, Wellesley College. Work and study in the Exhibitions Office, with Dorothy Globus, from January 6, 1986 to February 15, 1986.

Reed, Charlotte, R., B.A. Candidate, LaFayette College. Work and study in the Exhibitions Office, with Dorthy Globus, from September 19, 1985 to December 31, 1985.

Schwartz, Kara, B.A. Candidate, Colby College. Work and study in the Programs Office, with Susan Yelavich, from January 6, 1986 to February 15, 1986.

Sweetser, Susann, B.A. College of William and Mary. Work and study in the Programs Office, with Susan Yelavich, from July 1, 1985 to December 31, 1985.

Taggart, Arabelle, J., Kimbolton School, England. Work and study in the Decorative Arts Office, with David McFadden, from November 4, 1985 to December 31, 1985.

Urbanelli, Elisa, M.A. Candidate, Yale University. Work and study in the Decorative Arts Office, with David McFadden, from June 9, 1986 to August 15, 1986.

Vogel, Elaine, C., B.A. Indiana University. Work and study in the Public Affairs Office, with Isabelle Silverman, from September 5, 1985 to December 31, 1985.

Yang, MeiPu, Sidney and Celia Siegel Fellow, B.A. Candidate, University of Pennsylvania. Work and study in the Business Office, with William Gaske, from June 9, 1986 to August 15, 1986.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Michael Fitzpatrick, B.A. Candidate, Brown University. Work and study with Teresia Bush, Department of Education, from June 16 through August 22, 1986.

Bruce Lineker, B.A., Duke University. Work and study with Joseph Shannon, Department of Exhibits and Design, from June 9 through August 15, 1986.

Margot McIlwain, B.A. Candidate, Smith College, Smithsonian Institution American Studies Program Intern. The Arthur B. Davies Collection of the Hirshhorn Museum, with Dr. Judith Zilczer, Department of Painting and Sculpture, from September 1 through December 18, 1985.

Sharan Appa Rao, Madras, India. Work and study with Edward P. Lawson, Department of Education, from June 9 through August 8, 1986.

NATIONAL AIR AND SPACE MUSEUM

James Baker, J.D. candidate, University of Michigan, with Mr. Martin Collins, Department of Space Science and Exploration, from June 16 through August 22, 1986.

Edward Brown, Jr., B.A. candidate, University of Maryland, with Ms. Susan Ewing, Information Management Division, Archival Support Center, from May 28 through September 9, 1986.

Adama Conteh, B.A. cardidate, Howard University, with Mr. Martin Collins, Department of Space Science and Exploration, from January 13 through May 16, 1986.

Timothy Carter, B.A. candidate, Appalachian State University, with Mr. Walter Roderick, Paul E. Garber Preservation, Restoration, and Storage Facility, from June 10 through August 15, 1986.

Dennis Dearnbarger, M.S. candidate, University of Illinois, with Mr. Harry Heiss, Information Management Division, from June 9 through August 15, 1986.

Thomas Dietz, B.A. candidate, University of Virginia, with Dr. Von Hardesty, Department of Aeronautics, from June 9 through August 15, 1986.

Susan Harrison, B.A. candidate, Hood College, with Ms. Mary Henderson, Department of Exhibits, Art Unit, from June 9 through August 5, 1986.

Barbara Irwin, M.A. candidate, George Washington University, with

Mr. Dominick Pisano, Department of Aeronautics, from August 24 through December 10, 1986.

William Kirschner, B.A. candidate, State University of New York at Binghampton, with Ms. Kathleen Brooks-Pazmany, Department of Aeronautics, from July 13 through August 15, 1986.

Mei Lin Kwan-Gett, B.A. candidate, Harvard-Radcliffe College, with Ms. Kasse Andrews-Weller, Office of Education, from June 9 through August 22, 1986.

Erik Ledbetter, B.A. candidate, Johns Hopkins University, with Dr. Joseph Tatarewicz, Department of Space Science and Exploration, from June 9 through August 15, 1986.

Beth Parkhurst, Ph.D. candidate, Brown University, with Dr. Paul Ceruzzi, Department of Space Science and Exploration, from June 2 through August 8, 1986.

Brian Powell, B.S. candidate, Cornell University, with Dr. Thomas Watters, Center for Earth and Planetary Studies, from June 9 through August 15, 1986.

Paul Silbermann, B.A. candidte, University of Maryland, with Ms. Susan Ewing, Information Management Division, Archival Support Center, from June 19 through August 30, 1986.

Karl Werner, B.A. candidate, Villanova University, with Mr. Frank Florentine, Department of Exhibits, Audiovisual Unit, from July 13 through August 15, 1986.

High School Interns

William Conn, High School candidate, McComb High School, with Ms. Monica Knudson, Library, from June 9 through July 11, 1986.

Christopher Gordon, High School candidate, Greenhills School, with Ms. Kathleen Brooks-Pazmany, Department of Aeronautics, from May 15 through June 5, 1986.

Angelina Han, High School candidate, Madeira School, with Mr. Dana Bell, Information Management Division, from February 5 through May 30, 1986.

Arnold Kemp, High School candidate, Boston Latin School, with Ms. Mary Henderson, Department of Exhibits, Art Unit, from June 9 through July 12, 1986.

Ornetta Noville, High School candidate, Ballou Senior High School, with Ms. Betty Bibb, Samuel P. Langley Theater, from June 30 through August 15, 1986.

Helaine Osternick, High School candidate, Madeira School, with Mr. Dana Bell, Information Management Division, from January 15 through May 21, 1986.

Academic and Research Training Appointments

George E. McGill, Visiting Scientist. Geology of the northern plains of Mars, with Dr. Ted Maxwell, Center for Earth and Planetary Studies, from September 15, 1986, through January 15, 1987.

NATIONAL MUSEUM OF AFRICAN ART

Adrienne Morris, Georgetown University. Work with the Registrar's Office, from May 19 through August 19, 1986.

Kimberly Taylor, University of Montana. Work with the Eliot Elisofon Photographic Archives, from January 7 through March 21, 1986.

Karen Shemet, American University. Work with Warren Robbins, Director Emeritus, from January 30 through April 17, 1986.

NATIONAL MUSEUM OF AMERICAN ART

University Interns

Constance Badowsky (Indiana University). January 13-April 18, 1986.

George Benot (Howard University). January 13-April 18, 1986.

Laura Brunjes (Smith College). September 9-December 6, 1985.

Diana Gaston (University of Kansas). September 9-December 6, 1985.

Tonia Horton (William and Mary College). January 13-April 18, 1986.

Kathleen Howe (University of Southern California in Los Angeles). July 1 -October 31, 1985.

Alice Montag (Wellesley College). September 9, 1985-April 18, 1986.
Margaret Moore (George Washington University). September 9, 1985-April 18, 1986.

Edie Rogat (University of Virginia). September 9, 1985-April 18, 1986. Virginia Tate (University of the South). September 9, 1985-April 18, 1986.

Shannon Thompson (exceptional high school graduate from Camden-Rockport High School, Maine). September 9, 1985-April 18, 1986.

Summer Interns

Sara Baker (Haverford College). June 2-July 25, 1986.

Myra Merritt (University of Michigan). June 16-August 22, 1986.

Marianna Robin (DePaul University). June 2-July 25, 1986.

Ann Rubin (Claremont Men's College). June 2-July 25, 1986.

Karen Snead (University of South Florida). June 2-July 25, 1986.

Cheryl Sutton (Temple University). June 16-August 22, 1986.

Terrance Starr (Teacher, Fremont High School, Oakland Calif.). Intern Appointment, July 7-August 1, 1986.

Peter Wilson (Kenyon College). June 2-July 25, 1986.

NATIONAL PORTRAIT GALLERY

Charlotte Brody, Graduate, George Washington University. Wrote program notes for Portraits in Motion: The Exploring Personality, "Stormy Petrel," with Kenneth Yellis, Department of Education, from September 5, 1986 through December 31, 1986. Jenifer Browning, Undergraduate, Bringham Young University. Made checklists of illustrations related to the Office of Publications, with Frances Wein, Office of Publications, from July 28, 1986 through October 5, 1986. Stephen DeBacker, High School Student, Thomas More Prep. Updated biographical files related to the Office of the Historian, with James Barber, Office of the Historian, from June 6, 1986 through July 11, 1986. Mary Fearon, Undergraduate, College of Wooster (Ohio). Performed research on the American portraits which were included in the 1983 Chicago World's Fair, with Carolyn Carr, Assistant Director for Collections, from May 20, 1986 through August 29, 1986. Cynthia S. Fitzgibbons, Graduate, George Washington University. Conducted research on the Charles Willson Peale Papers, with Lillian Miller, Peale Papers, from January 14, 1986 through April 18, 1986. Susan Reed Foster, Undergraduate, Yale University. Researched the American portraits painted by Anders Zorn, with Carolyn Carr, Assistant Director for Collections, from June 30, 1986 through September 2, 1986. Vivien Mary Green, Undergraduate, University of California at Santa Cruz. Helped develop Portraits in American Jazz series, wrote program notes for the concerts and assisted the Department of Education in coordinating summer activities, with Kenneth Yellis, Department of Education, from July 1, 1986 through August 31, 1986. Irene Groote, Undergraduate, Smith College. Cataloged portrait data, made computer data entries and researched portrait information, with Richard Doud, Catalog of American Portraits, from January 6, 1986 through January 24, 1986. Ronald M. Joseph, Undergraduate, Howard University. Served as assistant researcher and editor of the Charles Willson Peale Papers, with Lillian Miller, Peale Papers, from January 13, 1986 through August 15, 1986. Jennifer Korbet, High School Student, St. Agnes School. Performed biographical research on the American sitters of Anders Zorn and researched some aspects of the permanent collection, with Carolyn Carr, Assistant Director for Collections, from May 19, 1986 through August 31, 1986. Kelly Kramer, High School Student, St. Agnes School. Conducted biographical research on the American sitters of Anders Zorn, with Carolyn Carr, Assistant Director for Collections, from May 19, 1986 through May 30, 1986. Dick Levinson, Graduate, California State University at Sacramento. Wrote program notes for Portrait in Motion: The Exploring Personality, "A Brave Man's Part" and assisted in the organization of the Portraits in American Jazz concert series, with Kenneth Yellis, Department of Education, from August 31, 1986 through October 31, 1986. M. Terrence McKay, Graduate, University of Maryland. Researched "The Gilded Age" through the works of the American artist Sanford Robinson Gifford, with Lillian Miller, Peale Papers, from November 11, 1985 through August 30, 1986. Barbara Overdier, Undergraduate, St. Olaf College. Researched and updated

biographical files of American portraits related to the permanent collection files in the Office of the Historian, with James Barber, from January 1, 1986

through January 27, 1986.

Belen Ponferrada, Undergraduate, George Washington University. Assisted in researching the biographical files of the permanent collection in the Office of the Historian, with James Barber, Office of the Historian, from January 28, 1986 through April 17, 1986.

Andrew Sobchak, Undergraduate, University of Cincinnati. Researched and verified art historical information for checklist for publications, with Monroe Fabian, Associate Curator of Paintings/Sculpture, from July 14, 1986 through November 1, 1986.

Ariane M. Trifunovic, Graduate, George Washington University. Developed and conducted formative evaluation of the Portraits in Motion Program, and assisted the Education Department with numerous tasks related to public programming, with Kenneth Yellis, Department of Education, from January 13, 1986 through April 18, 1986.

Robert Urstein, Undergraduate, Claremont McKenna College. Updated biographical files on sitters and contributors to the permanent collection, with James Barber, Office of the Historian, from May 5, 1986 through August 6, 1986.

Roy Williams, High School Teacher at Wando High School, Mount Pleasant, South Carolina. Worked with South Carolina portraits from the permanent collection and developed a program based on that research for high school students. Cynthia Wilson, High School Student, Parkside High School. Catalogued library materials and performed other duties necessary for library maintenance, with Cecilia Chin, Librarian, from June 9, 1986 through July 11, 1986.

OFFICE OF HORTICULTURE

Christopher Dodson, Office of Horticulture Intern, Washington College, Chestertown, MD. Work and study in a plant collection greenhouse, with August A. Dietz IV, Greenhouse-Nursery Division from May 19, 1986 through August 15, 1986.

Isaac Fong, Office of Horticulture Intern, University of California-Davis. Work and study in a museum horticulture office, with Kathryn Meehan, Historic Horticulture Division from May 13, 1986 through November 21, 1986. Lydia Koenig-Brock, Office of Horticulture Intern, Russell Sage College, Troy, NY. Work and study in a plant collection greenhouse, with August A. Dietz IV, Greenhouse-Nursery Division from May 19, 1986 through August 20, 1986.

Leslie Firl, Office of Horticulture Intern, Gallaudet College. Work and study in a plant collection greenhouse, with August A. Dietz IV, Greenhouse-Nursery Division from June 18, 1986 through August 22, 1986.

Brian Young, Office of Horticulture Intern, Forest Hill, Louisiana. Work and study in a plant collection greenhouse and on museum grounds, with August A. Dietz and Kenneth Hawkins, Greenhouse-Nursery Division and Grounds Management Division from June 9, 1986 through July 11, 1986.

OFFICE OF FOLKLIFE PROGRAMS

- Edward Ayom, Ph.D. candidate, University of New York. Conduct research on linguistic and pedagogic exegesis of some (Jieng) Dinka tongue twisters, riddles, and song and dance games, with Peter Seitel, from June 30 through September 5, 1986.
- Herman Beavers, Ph.D. candidate, Yale University. Analyze and catalogue tapes from the Festival of Black Storytelling, with Peter Seitel and Phyllis May-Machunda, from June 30 through August 15, 1986.
- Olivia Cadaval, Ph.D. candidate, George Washington University. Research and index ethnographic material on Hispanic performers at the Festival of American Folklife, with Peter Seitel, from September 8 through November 28, 1986.
- Francesca Cappelletto, M.A. candidate, University of North Carolina, Chapel Hill. Analyze the Festival of American Folklife and its ramifications from a theoretical perspective, with Peter Seitel, from September 15 through November 21, 1986.
- Cecily Cook, B.A., Brown University. Conduct archival work and accession family folklore materials, with Richard Derbyshire, from December 3, 1985 through June 1, 1986.
- Todd DeGarmo, Ph.D. candidate, George Washington University. Conduct photographic research for the Festival of American Folklife Japan Program, with Alicia Gonzalez, from January 3 through July 20, 1986.
- Martha Oyler, M.A., George Washington University. Research various types of programs implemented by the Office, from conception to public presentation, with Marjorie Hunt, from June through September, 1986.
- Carlos Perez, Ph.D. candidate, University of California, Los Angeles. Assist with the Columbian Quincentenary Project, with Alicia Gonzalez, from July 7 through September 26, 1986.
- Margaret Wade-Lewis, Ph.D. candidate, State University of New York, New Paltz. Analyze and catalogue tapes from the Festival of Black Storytelling, with Peter Seitel and Phyllis May-Machunda, from July 1 through August 29, 1986.

OFFICE OF MUSEUM PROGRAMS

Internships in Museum Practices Program

Caroline Alyea	Cecilly Cook
(graduate, Princeton Univ.)	(graduate, Brown University) OFP
Nicole Arena	Andrew Csont
(Guilford College)	(SUNY, Oswego)
OPA	NMAH
Connie Badowski	Jolene Dancey
(Indiana University)	(JFK University)
NMAA	SI-OR
Elizabeth Bailey	Lisa Daniels
(graduate, Vassar College)	(Albright College)
NMNH	NMAH
Mohamed Balahmar	Mark Davis
(Lamu Museum, Kenya)	(William and Mary)
OMP, NMAH, ANM	NMAH
Hollye Barrett	Alison Dawe
(Mount Holyoke College)	University of Michigan)
NMAH	NMAH
George Benoit	Deborah Dunn
(Howard University) NMAA	(Bishop Museum, Hawaii) NMNH
Nancy Bercaw	Benjamin Filene
(University of Pennsylvania)	(Brown University)
NMAH	NMAH
Maria Bianchini	Robin Fogg
(Natl. Mus. of Hist., Brazil)	(George Washington University)
NMAH	OMP
Amy Bix	Julia Forbes
(Princeton University)	(Univ. of Calif, Santa Barbara)
NMAH	NNMNH
Marjanna Bogan	John Foster
(Univ. of St. Andrews, U. K.)	(Grinnell College)
NMAH	NMAH
Rena Boothe	Lucy Fowler
(Institute of Jamaica) NMNH	(University of New Mexico) NMNH
Stephanie Botvin	Becky Gambrill
(graduate, Washington Univ.)	(Goucher College)
NMAH	NMAH
David Burnhauser	Kathleen Golden
(Virginia Commonwealth Univ.)	(graduate, Rutgers College)
ANM	NMAH
Lori Burns	Vivien Greene
(Newbury College) NZP	(Univ. of Calif. Santa Cruz) NPG
Diane Carson	Sharon Harty
(St. Louis Community College)	(Saint Peter's College)
NMAH	OPA
Lila Clark	Carol Hausner
(University of Kansas)	(American University)
DIA-OSP	MMAH

Muriel Pouyat Caroline Henry (Univ. of the West Indies) (The College of Wooster) NMAH NASM Sarah Reenders Jenifer Hightower (Southern Methodist University) (Hillsdale College) Beverly Johnson Carolyn Senn (graduate, Univ. of Mass.) (Mount Holyoke College) Sarah Kendall Gerdur Sigfusson (graduate, Amherst College) (Hollins College) NMAH Museum Shops Andrew Klafter Regina Souther (College of the Holy Cross) (George Washington University) NMAH NMNH Paul Kubik David Stevens (South Dakota Historical Society) (University of Minnesota) Jean Lewis Deborah Stone (Sweetbriar College) (George Washington University) Barbara Strunk Mary Martin (faculty, DC Public Schools) (Sarah Lawrence College) Freer Valerie Mathes Kim Taylor (University of Montana) (Arizona State University) NMAH NMAFA Edward Turner Teresa McGervey (California University of PA) (Emory University) NMNH Julia Van Trees Marian Menzel (University of Virginia) (Montgomery College) DIA-OSP Jennifer Morash Kristine Wagner (Univ.of Calif. Irvine) (Hope College) Elizabeth Nosek Mark Wertheimer (Hamline University) (Univ. of Wisconsin, Madison) NMAH NMAH Joe O' Loughlin Rachel Wiesen (Calif. Polytech Univ.) (Univ. of Calif. Los Angeles) NMAH OMP Barbara Overdier Abby Winland (St. Olaf College) (American University) NPG NMAH Irene Palmer John Worley (George Washington University) (Grinnell College) Belen Ponferrada Mary Wriedt (Univ. of the Phillipines) (University of Michigan)

OFFICE OF MUSEUM PROGRAMS

Visiting Professionals Program

Patricia Butts Gawdat Gabra Abdel-Sayed Columbus Mus. of Arts & Sci. Coptic Museum Cairo, Egypt Columbus, Georgia Pierre Chabot Isabel Abreu Musee de la Civilisation USIS Oporto, Portugal Ouebec, Canada Patrice Ceisel Paloma Acuna Ministry of Culture Shedd Aguarium Madrid, Spain Chicago, Illinois Abdel Salam Bakr Abu Elliel Beverly Chico Mizel Museum of Judaica Coptic Museum Denver, Colorado Cairo, Egypt Zahra Al-Ameer Susan Childs Bahrain National Museum L.A. Childrens Museum Manama, Bahrain Los Angeles, California Mohamad Said Al Blooshi Mala Chinoy Sarabhai Community Science Ctr. Gulf Folklore Center Doha, Qatar Ahmedabad, India Barbara Coddington Mohammed Al-Farea Wash. State Univ. Museum Pullman, Washington ARAMCO Dharan, Saudi Arabia Abdullah Aziz Al-Ghunaim Codruta Cruceanu National Museum of Art Bucharest, Romania Dharan. Saudi Arabia Alissandra Cummins Ahmed Ali Al-Ibbi Old City of Sanaa Barbados Museum & Hist. Soc. Sanaa, Yemen Arab Republic Barbados Abdullah Isa Al-Isa John Darby Otago Museum ARAMCO Dharan, Saudi Arabia Dunedin, New Zealand Said Al-Shakouri Cietta David-Mensah ARAMCO USIS Dharan, Saudi Arabia Monrovia, Liberia Alberto Angela Veronique Deschamps University of Rome USIS Paris, France Rome, Italy David Anderson Marina Desin National Maritime Museum Drustvo Konavle Konavle, Yugoslavia London, England Mitsuru Aoki Joe Devilee Queensland Art Gallery South Brisbane, Australia USIS Sapporo, Japan Teguh Asmar Mary Anne Dickerson Roanoke Valley Science Museum Roanoke, Virginia National Museum Jakarta, Indonesia Pierre Ayamine-Anguilet Deidra Edmond-Webber Natl. Mus. of Arts & Tradition Grand Rapids Public Museum Libreville, Gabon Grand Rapids, Michigan Catherine Bonnefoy Denise Ellis High Museum Museum of Natural History Paris, France Atlanta, Georgia

Ibrahim El-Nawawy Cairo Museum Cairo, Egypt Eduardo Faith Museum of the Central Bank San Jose, Costa Rica Nancy Fister The Bowers Museum Santa Ana, California Lawrence Foanaota National Museum Honaria, Solomon Islands Mohamad Safa Ghannoum Directorate of Museums Damascus, Syria Florencia Garcia Honduran Inst. Hist. & Anth. Tegucigalpa, Honduras Amy German Morris Museum Morristown, New Jersey Monica Gili Museum Department of Barcelona Barcelona, Spain Myrtle Glascoe Avery Research Center for Afro-American Hist. & Culture Charleston, South Carolina Denise Glover Natl. Afro-American Museum Columbus, Ohio Jan Goffney Detroit Public Schools Detroit, Michigan Gilbert Gonzalez Hayes Presidential Center Fremont, Ohio Ernesto Gonzalez-Licon Natl. Inst. of Anth. & Hist. Oaxaca, Mexico Harriett Green The Columbia Museum Columbia, South Carolina J. P. Greene Greater Manchester Museum of Science and Industry Manchester, England Pathe Gueye National Theatre

Senegal

Deborah Haase Stirling Smith Art Gallery Stirling, Scotland Adnan Hadidi Jordan Archeological Museum Amman, Jordan Brian Hayton NW Museum & Art Gallery Service Blackburn, England Arnulf Herbst State Museum of Wiesbaden Frankfurt, West Germany Be Herrera Crocker Museum Sacramento, California Louis Hicks Carver Museum Austin, Texas Lazare Henon Houetin Office of the Arts Benin Paivi Hovi Turku Art Museum Turku, Finland Osamu Inoue TEPCO Tokyo, Japan Genevieve Issembe National Ballet of Gabon Libreville, Gabon Sadhu Ishwarcharandas Akshardham Amdavad, India Jane Peirson Jones Birmingham City Museum Birmingham, England Ombone Kaiku Natl. Museum & Art Gallery Papua, New Guinea Bi N'Dri Antoine Kakou Natl. Inst. of the Arts Ivory Coast Antun Karaman Dubrovnik Art Gallery Dubrovnik, Yugoslavia David Kato Washington Park Zoo Portland, Oregon

Maria Isabel Lussich Aurangzeb Khan USIS Dir Museum Montevideo, Uruguay Chakdara, Pakistan T. T. Tseliso MacDonald Mabote Nadim Khouri Lesotho Evangelical Church Afamiya Museum Maseru, Lesotho Hama, Syria Amy Kirschke Ana Magraner Ministry of Culture Contemporary Arts Center New Orleans, Louisiana Madrid, Spain Madeline Mallah Fujio Koh Luxor Museum TEPCO Luxor, Egypt Tokyo, Japan Moussa Konate Maria Marable Musee National du Mali Southwest Museum Bamako, Mali Los Angeles, California Maria Martin Konan Kouakou Aka Cultural Ctr. of Bouake Fine Arts Circle Madrid, Spain Ivory Coast Fahad Kulaban Sebastien Matingou ARAMCO Ministry of Culture Dharan, Saudi Arabia Congo Masaki Matsuda Inad Omar Kurdi Mayor's Office TEPCO Amman, Jordan Tokyo, Japan Charle Lamonica Kevin George Mbayu Science Museum of Charlotte Natl. Museum of Cameroon Charlotte, North Carolina Yaounde, Cameroon Irma Lanzas de Chavez Birgit Mershen Min. of Cult. & Communication Yarmouk University San Salvador, El Salvador Irbid, Jordan Gloria Lara-Hasemann Robert Mizaki Museum of Modern Art Honduran Inst. Hist. & Anth. New York, New York Tegucigalpa, Honduras Mary Lee Mary Mock Colonial Williamsburg Indianapolis Museum of Art Williamsburg, VA Indianapolis, Indiana Elizabeth Mullins Amidou Lega Min. of Information & Culture Sandy Spring Museum Ougadougou, Burkina Faso Sandy Spring, Maryland Sue Levy Garfield Murray Ministry of Sport, Culture University Museum Philadelphia, Pennsylvania and Youth Affairs Cheng-Shing Lin Trinidad and Tobago Natl. Mus. of Natural Science Abdulrahman Mohamed Mwinzagu Taichung, Taiwan Fort Jesus Museum Loukia Loizou Mombasa, Kenya Nicosia Levention Museum Stella Tsitsi Nduku Natl. Museums & Monuments Nicosia, Cyprus Harare, Zimbabwe Jose Lopez Honduran Inst. Hist. & Anth. Pie Claude Ngumu Tegucigalpa, Honduras Ministry of Culture Cameroon

Loretha Nichols Elizabeth Robinson Wichita Art Museum USIS Wichita, Kansas Kingston, Jamaica Patamaka Sukontamarn Maria Rosa Carlos Costa Pinto Museum USIS Bahia, Brazil Bangkok, Thailand Manuela Patat Burama K. Sagnia USIS Natl. Museum of Gambia Trieste, Italy Banjul, The Gambia Evanice Pauletti Mohamed Said-Ahmed Art Mus. of Rio Grande do Sul Egyptian Antiquities Org. Porto Allegre, Brazil Sakkara, Egypt Palitha Pelpola Ayesha Salam Mahaweli Museum & Center USIS Mahaweli, Sri Lanka Islamabad, Pakistan Jarno Peltonen Ferenc Sarkay Museum of Applied Arts Ministry of Culture Helsinki, Finland Budapest, Hungary Antonio Perez Otto Schondube USIS Natl. Inst. of Anthropology Manila, Phillipines Guadalajar, Mexico Janine Schotsman Elena Pujol USIS Mus. Royaux d'Art et d'Hist. Barcelona, Spain Brussels, Belgium Pedro Querejazu Kamel Sh'hadeh National Museum of Art Mar'a Museum La Paz, Bolivia Idleb, Syria Lydia Quigley Roberto Siage Ponce Museum USIS Ponce, Puerto Rico Montevideo, Uruguay B. J. Quinlan Bakary Sidibe Natl. Museum of Gambia Salem Public Library Salem, Oregon Banjul, The Gambia Omar Rahamat Radja Simatupang Jordanian Royal Society for Min. of Information the Conservation of Nature Jakarta, Indonesia Amman, Jordan Oscar Simela Natl. Museums & Monuments Esperee Rahary Ministry of Culture Harare, Zimbabwe Abdul Aziz Ali Ebrahim Sowaileh Madagascar Bahrain National Museum Barbara Requa Cultural Training Centre Manama, Bahrain Kingston, Jamaica Mitsuaki Suenaga Eurydice Retsila TEPCO Museum of Greek Folk Art Tokyo, Japan Athens, Greece Hiroshi Suzuki Bernard Riordan TEPCO Nova Scotia Art Gallery Tokyo, Japan Halifax, Canada David Swain Hocine Rizi Natl. Cartoon Centre USIS Canberra, Australia Algiers, Algeria

Cornelia Syre Bavarian State Coll. of Art Munich, West Germany Ato Tadesse-Terfa Ministry of Culture Addis Ababa, Ethiopia Rosalba Tardito Cult. & Hist. Assets Milan, Italy Joseph Zaki Tawdros Egyptian Antiquities Org. Cairo, Egypt Adil Naji Tawfiq Min. of Culture & Information Baghdad, Iraq Maria Trindad Art & Culture Institute Ouro Preto, Brazil U Aung Thein Nyunt Ministry of Religion Rangoon, Burma U Maung Maung Lay Ministry of Religion Rangoon, Burma J. H. van Brakel Tropenmuseum

Amsterdam, The Netherlands

Vincent van den Ven Amsterdam Historical Society Amsterdam, The Netherlands Jan Van Kerkhove USIS Brussels, Belgium Elsa Minetti de Vidal-Perri Natl. Historical Museum Canelones, Uruguay Corinna de Weerdt Inst. for Educ.of the Arts Rotterdam, The Netherlands Barbara Wild Gallery of the Belvedere Vienna, Austria James Wong Hong Kong Museum of Art Hong Kong James Yaldwyn National Museum of New Zealand Wellington, New Zealand Yumiko Yamashita USIS Tokyo, Japan Ginger Yang National Museum of Natural Science

Taichung, Taiwan

Appendix 5

Publications of the Smithsonian Institution Press in Fiscal Year 1986

GENERAL PUBLICATIONS

Trade Publications

- Agar, Michael H. Independents Declared: The Dilemma of Independent Trucking. 192 pages. Cloth: \$24.95; Paper: \$14.95. April 1986.
- Brown, Michael F. Tsewa's Gift: Magic and Meaning in an Amazonian Society. 220 Pages, 8 black-and-white illustrations, 4 figures, 8 tables, 2 maps. Cloth: \$19.95. January 1986.
- Carr, Carolyn Kinder and Christman, Margaret C.S. <u>Gaston Lachaise Portrait Sculpture</u>. 168 pages, 95 black-and-white illustrations. Paper: \$16.95. December 1985.
- Christienne, Charles and Lissarague, Pierre; Translated by Francis Kianka. A History of French Military Aviation. 532 pages, 11 color and 494 black-and-white illustrations, 40 tables, 3 maps. Cloth: \$60.00. August 1986.
- Passenger Airships: Graf Zeppelin and Hindenburg. 226 pages, 88 black-and-white illustrations. Cloth: \$24.95. November 1985.
- Ewers, John C. Plains Indian Sculpture. 240 pages, 26 color and 220 black-and-white illustrations. Cloth: \$39.95; Paper: \$24.95. May 1986.
- Fitzhugh, William W. Cultures in Contact: The European Impact on Native Cultural Institutions in Eastern North America, A.D. 1000-1800. 326 pages, 19 black-and-white illustrations, 7 tables, 22 maps. Cloth: \$29.95. November 1905.
- Fu, Shen, Lowry, Glen D., and Yonemura, Ann. From Concept to Context:

 Approaches to Asian and Islamic Calligraphy. 166 pages, 15 color and 96 black-and-white illustrations. Paper: \$22.50. July 1986.
- Hamel, Paul B. <u>Bachman's Warbler: A Species in Peril</u>. 110 pages, 6 blackand-white illustrations, 2 figures, 4 tables. Cloth: \$11.95. July 1986.
- Hamerstrom, Frances; Foreword by Roger Tory Peterson. Harrier: Hawk of the Marshes--The Hawk That is Ruled by a Mouse. 208 pages, 34 black-and-white illustrations, 18 figures. Cloth: \$24.95; Paper: \$10.95. July 1986.
- Harris, Neil and Norelli, Martina R.; Foreword by Charles C. Eldredge.

 Art, Design, and the Modern Corporation: The Collection of Container

 Corporation of America, A Gift to the National Museum of American Art.

 136 pages, 32 color and 90 black-and-white illustrations. Paper:

 \$19.95. October 1985.
- Henry, J. David. Red Fox: The Catlike Canine. 176 pages, 10 color and 46 black-and-white illustrations. Cloth: \$22.50. June 1986.
- Hoage, R. J. Animal Extinctions: What Everyone Should Know. 206 pages, 30 black-and-white illustrations. Paper: \$9.95. December 1985.
- Jackson, Michael. Barawa and the Ways Birds Fly in the Sky. 212 pages, 2 maps. Cloth: \$18.95. April 1986.

- Kloss, William; Foreword by Charles C. Eldredge. <u>Treasures From the National Museum of American Art.</u> 256 pages, 31 color and 92 black-and-white illustrations. Cloth: \$39.95. March 1986.
- Kraft, Stephen. <u>Kids' Smithsonian Experience: A Smithsonian Coloring</u>
 <u>Book.</u> 32 pages, 1 color and 29 black-and-white illustrations. Paper: \$2.75. March 1986.
- Lapham, Lewis. <u>High Technology and Human Freedom</u>. 170 pages, 5 black-and-white illustrations. Cloth: \$19.95; Paper: \$9.95. November 1985.
- Leary, William. Aerial Pioneers: The U.S. Air Mail Service, 1918-1927.
 310 pages, 37 black-and-white illustrations, 5 maps. Cloth: \$22.50.
 December 1965.
- Lucas, Geraldine. <u>Toys: A Smithsonian Coloring Book</u>. 32 pages, 1 color and 29 black-and-white illustrations. Paper: \$2.75. March 1986.
- Meltzer, David J., Fowler, Don D., and Sabloff, Jeremy A., eds. American Archaeology Past and Future: A Celebration of the Society for American Archaeology, 1935--1985. 480 pages, 32 figures. Cloth: \$35.00; Paper: \$19.95. April 1986.
- Montgomery, G. Gene. The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas. 462 pages, 9 black-and-white illustrations, 174 figures. Paper: \$45.00. March 1986.
- Mosely, Keith. The Flight of the Pterosaurs: A Pop-Up Rook. 56 pages, 28 color illustrations. Cloth: \$13.95. June 1986.
- Myers, Fred R. Pintupi Country, Pintupi Self: Sentiment, Place, and Politics among Mestern Desert Aborigines. 334 pages, 8 black-and-white illustrations, 11 maps. Cloth: \$27.50. July 1986.
- Oakes, Claudia M. United States Nomen in Aviation Through World War I. 44 pages, 48 black-and-white illustrations. Paper: \$5.95. October 1985.
- Quill, Jeffrey. <u>Birth of a Legend: Spitfire</u>. 160 pages, 10 color and 101 black-and-white illustrations. Cloth: \$22.50. May 1986.
- Riaboff, Alexander. <u>Gatchina Days: Reminiscenses of A Russian Pilot</u>. 184 pages, 85 black-and-white illustrations, 8 maps. Cloth: \$19.95. May 1986.
- Robinson, George S. and White, Jr., Harold M. Fnvoys of Mankind: A Declaration of First Principles for the Governance of Space Societies. 316 pages. Cloth: \$19.95. September 1986.
- Thomson, Peggy and Park, Edwards. The Pilot and the Lion Cub: Odd Tales from the Smithsonian. 142 pages, 25 black-and-white illustrations. Paper: \$4.95. April 1986.
- Viola, Herman J. and Margolis, Carolyn. <u>Magnificent Voyagers: The U.S.</u>
 <u>Exploring Expedition, 1838-1842</u>. 304 pages, 68 color and 142 black-and-white illustrations. Cloth: \$35.00; Paper: \$17.50. October 1985.
- Wooldridge, E. T. Focus on Flight: The Aviation Photography of Hans Groenhoff. 112 pages, 10 color and 133 black-and-white illustrations. Paper: \$19.95. October 1985.
- Mooldridge, E. T. Images of Flight: The Aviation Photography of Rudy Arnold. 160 pages, 10 color and 114 black-and-white illustrations. Paper: \$16.95. August 1986.
- Yochelson, Ellis L. The National Museum of Natural History: Seventy-five Years in the Natural History Building. 216 pages, 194 black-and-white illustrations, 2 tables, 7 maps. Paper: \$17.95. November 1985.

Trade Reprints

- Aditi: The Living Arts of India. Dedication by Robert McC. Adams; Foreword by S. Dillon Ripley; Preface by Rajeev Sethi; Introduction by Pupul Jayakar. 280 pages, 71 color and 200 black-and-white illustrations. Paper: \$19.95. March 1986.
- Ahlborn, Richard E. The Penitente Moradas of Abiquiu. 52 pages, 55 black-and-white illustrations. Paper: \$3.95. May 1986.
- Dinosaurs: A Smithsonian Coloring Book. 32 pages, 1 color and 29 blackand-white illustrations. Paper: \$2.95. April 1986.
- Evans, Howard Ensign. The Pleasures of Entomology: Portraits of Insects and the People Who Study Them. 238 pages, 19 black-and-white illustrations. Paper: \$14.95. April 1966.
- First Ladies' Hall: A Smithsonian Coloring Book. 32 pages, 1 color and 29 black-and-white illustrations. Paper: \$2.95. April 1986.
- Hallion, Richard P., ed. The Wright Brothers: Heirs of Prometheus. 146 pages, 97 black-and-white illustrations. Paper: \$9.95. October 1985.
- Johnson, Clarence L. "Kelly," with Smith, Maggie. Kelly--More Than My Share of It All. 210 pages, 22 black-and-white illustrations. Cloth: \$17.50. April 1986.
- Kloss, William. Treasures From the National Museum of American Art. 256 pages, 81 color and 92 black-and-white illustrations. Cloth: \$39.95. August 1956.
- Leigh, Eghert G., Jr., Rand, A. Stanley, and Windsor, Donald M., eds. The Ecology of a Tropical Forest: Seasonal Rhythms and Long-Term Changes. 468 pages, 142 black-and-white illustrations. Paper: \$25.00. January 1986.
- Mammals: A Smithsonian Coloring Book. 32 pages, 1 color and 29 black-and-white illustrations. Paper: \$2.95. April 1906.
- Oakes, Claudia M. and Brooks-Pazmany, Kathleen L. <u>Aircraft of the National Air and Space Museum</u>. 176 pages, 373 black-and-white illustrations. Paper: \$6.50. August 1986.
- Whipple, Fred L. The Mystery of Comets. 276 pages, 17 color and 119 black-and-white illustrations. Cloth: \$24.95; Paper: \$12.50. April 1986.

Annual Reports

- American Historical Association Annual Report. 137 pages. October 1985.

 National Air and Space Museum Research Report 1985. 256 pages, 17 color and 51 black-and-white illustrations, 9 tables. November 1985.
- Smithsonian Year 1985. 192 pages, 1 color and 54 black-and-white illustrations, 1 figure, 22 tables. June 1986.
- Smithsonian Year 1985 Supplement: Chronology and Appendixes. 426 pages. April 1986.

Books

National Museum of Natural History

Yochelson, Ellis L. The National Museum of Natural History: Seventy-five Years in the Natural History Building. 216 pages, 172 black-and-white illustrations. November 1985.

Office of Fellowships and Grants

Smithsonian Opportunities for Research and Study in History, Art, Science 1985--1986. 169 pages, 2 black-and-white illustrations. October 1985.

Office of Protection Services

Smithsonian Institution Guard Manual. 64 pages, 1 black-and-white illustration. October 1985.

Smithsonian Institution Press

Virtuosi: Smithsonian Collection of Recordings. 159 pages, 43

black-and-white illustrations. January 1986.

Works of ". A. Mozart: Smithsonian Collection of Recordings. 64 pages, 23

black-and-white illustrations. July 1986.

Booklets

Office of Membership and Development

James Smithson Society Dinner Program 1986. 28 pages, 1 black-and-white illustration. September 1986.

Office of the Secretary

Bylaws of the Board of Regents and Charter Provisions of the Smithsonian Institution. 44 pages, 1 black-and-white illustrations. August 1986.

Smithsonian Institution Press

A Guide for Authors. 36 pages, 1 table. July 1986.

Brochures

Hirshhorn Museum and Sculpture Garden

Hirshhorn Museum and Sculpture Garden Spring/Summer 1986 Calendar. 8
pages, 12 black-and-white illustrations. April 1986.

Hirshhorn Museum and Sculpture Garden Fall/Winter 1986 Calendar. 8 pages,
13 black-and-white illustrations. August 1986.

National Museum of African Art

A Human Ideal in African Art: Bamana Figurative Sculpture. 8 pages, 4 hlack-and-white illustrations. April 1986.

The Rising of a New Moon: A Century of Tahwa Art. 8 pages, 4 black-and-white illustrations. January 1986.

National Museum of American Art

Brown, Gaye. <u>Introducing the National Museum of American Art</u>. 12 pages, 11 color illustrations. January 1986.

Hartigan, Lynda Roscoe. Afro-American Art: Twentieth-Century Selections. 16 pages, 6 color and 7 black-and-white illustrations. January 1986.

Norelli, Martina Roudabush. Art, Design, and the Modern Corporation: The Collection of the Container Corporation of American, A Gift to the National Museum of American Art. 8 pages, 7 black-and-white illustrations. October 1985.

The Peter A. Juley and Son Collection. 8 pages, 9 black-and-white illustrations. August 1986.

Resources for Research in American Art At the Smithsonian Institution's Gallery Place. 12 pages, 7 black-and-white illustrations. July 1986.

National Museum of Natural History

Department of Botany, Smithsonian Institution. 16 pages, 22 color and 6 black-and-white illustrations. July 1986.

Office of Elementary and Secondary Education

Career Awareness Program. 4 pages, 7 black-and-white illustrations. May 1986.

Office of Museum Programs

Office of Museum Programs. 6 pages. December 1985. Internships and Visiting Professionals Programs. 4 pages. May 1986.

Office of Protection Services

Welcome to the Protection Force. 6 pages, 1 black-and-white illustration.
November 1985.

Smithsonian Institution Libraries

Mota Bene: An Exhibition Compenorating the Tenth Anniversary of the Opening of the Dibner Library. 14 pages, 1 black-and-white illustration. August 1966.

Exhibition Catalogs

Hirshhorn Museum and Sculpture Garden

Rozensweig, Phyllis. <u>Directions 1966</u>. 60 pages, 29 color and 11 blackand-white illustrations. January 1986.

National Museum of African Art

Ezra, Kate. A Human Ideal in African Art: Bamana Figurative Sculpture.
48 pages, 48 black-and-white illustrations. April 1986.

Go Well, My Child: Photographs by Constance Stuart Larrabee In Collaboration With Alan Paton. 32 pages, 31 black-and-white illustrations. November 1965.

National Museum of American Art

Art, Design, and the Modern Corporation: The Collection of the Container Corporation of America. 136 pages, 32 color and 87 black-and-white illustrations. October 1985.

Breeskin, Adelyn. Romaine Brooks in the National Museum of American Art. 124 pages. 10 color and 81 black-and-white illustrations. January 1986.

Eldredge, Charles C., Schimmel, Julie, and Truettner, William. Art in New Mexico 1900--1945: Paths to Taos and Santa Fe. 224 pages, 120 color and 91 black-and-white illustrations. March 1986.

Kloss, William. Treasures From the National Museum of American Art. 256 pages, 81 color and 92 black-and-white illustrations. January 1986.

Lippard, Lucy and Broun, Elizabeth. <u>Patrick Ireland: Drawings 1965--1985</u>. 64 pages, 9 color and 20 black-and-white illustrations. April 1986.

Exhibition Checklists

National Museum of American Art

Figure Prints: The Washington Print Club Eleventh Biennial Members' Exhibition. 24 pages, 8 black-and-white illustrations. April 1986.

Flyers

National Air and Space Museum

Publications; Services for Disabled Visitors; and Educational Tours and Materials (three education division information flyers). 6 pages, 6 black-and-white illustrations. February 1986.

National Museum of African Art

Outreach Program, Winter 1986--1987. 6 pages, 2 black-and-white illustrations. August 1986.

Office of Elementary and Secondary Education

Intern '86. 2 pages, 6 black-and-white illustrations. December 1985.

Smithsonian Spectrum: Educational Opportunities 1986--1987. 4 pages, 13 black-and-white illustrations, 1 map. September 1986.

Folders

Hirshhorn Museum and Sculpture Garden

Robert Arneson: A Retrospective. 4 pages, 8 black-and-white illustrations.
April 1986.

National Museum of African Art

The Pising of a New Moon: A Century of Tahua Art. 8 pages, 4 black-and-white illustrations. January 1986.

Office of Fellowships and Grants

Research and Study Opportunities at the Smithsonian Institution. 6 pages, 1 black-and-white illustration. August 1986.

Office of Horticulture

The Trees of Christmas. 6 pages, 1 black-and-white illustration, 2 maps.

December 1985.

Smithsonian Tropical Research Institute

Opportunities for Research in the Tropics: Smithsonian Tropical Research
Institute (English and Spanish language versions). 6 pages, 1 color and
2 black-and-white illustrations. July 1986.

Invitations

National Museum of American Art

Art, Design, and the Modern Corporation: The Collection of the Container Corporation of America, A Gift to the National Museum of American Art. 2 invitations, 6 pages, 1 black-and-white illustration. October 1985.

Art in New Mexico, 1900--1945: Paths to Taos and Santa Fe. 6 pages, 1 color illustration. February 1986.

The Art of Turned Wood Rowls. 1 page. April 1986.

Figure Prints: The Washington Print Club Eleventh Biennial Members' Exhibition. 1 page. April 1986.

James Rosenquist: Paintings 1961--1985. 6 pages, 1 color illustration. September 1986.

Masterpieces of Time: Clocks by Wendell Castle. 1 page. April 1986.

Patrick Ireland: Drawings 1945--1985. 1 page. April 1986.

Treasures From the Land: Twelve New Zealand Craftsmen and Their Native Naterials. 6 pages, 2 black-and-white illustrations. October 1985.

Unknown Territory: Photographs by Ray K. Metzker. 6 pages, 1 black-and-white illustration. August 1966.

Miscellaneous

Office of Elementary and Secondary Education

Art to Zoo.
Let's Go To The Smithsonian.
On The Shoulders of Giants: Smithsonian Teacher's Guide. 2 pages.
December 1985.

Smithsonian Journeys Number Two, Autumn 1985. 14 pages, 30 black-and-white illustrations. December 1985.

Smithsonian Journeys Number Two, Autumn 1985 Teacher's Guide. 4 pages. December 1985.

Office of Fellowships and Grants

Directory of Fellows: Smithsonian Institution 1986 (cover). 2 pages, 1 color illustration. August 1, 1986.

Office of Public Affairs

Smithsonian Institution: Yesterday and Today. 1 page, 1 color illustration. July 1986.

Smithsonian Institution Research Reports Number 46, Autumn 1985.

Smithsonian Institution Research Reports Number 47, Minter 1985.

January 1986.

Smithsonian Institution Research Reports Number 48, Spring 1986.

May 1986.

Smithsonian Institution Research Reports Number 49, Autumn 1986.

September 1986.

Office of Protection Services

Special Police Commission Certificate. 1 page, 1 color illustration.

January 1986.

Certificate of Achievement. 1 page, 1 color illustration. July 1986.

Smithsonian Institution Press

National Air and Space Museum Archival Videodisk III Covers and Labels with Index. 32 pages. July 1906.

Posters

National Museum of African Art

A Human Ideal in African Art: Bamana Figurative Sculpture. March 1986.

National Museum of American Art

Art in New Mexico 1900--1945: Paths to Taos and Santa Fe. March 1986.

National Museum of Natural History

Fossils of the Atlantic Coastal Plain. 13 black-and-white illustrations. May 1986. Distributed by SI Press/\$5.00.

Fossil Shark Teeth. 23 black-and-white illustrations. October 1985.
Distributed by SI Press/\$5.00.

Office of Elementary and Secondary Education

On The Shoulders of Giants. 7 color illustrations. November 1985.

Office of Fellowships and Grants

Fellowships in Residence at the Smithsonian Institution 1987-1988. 1 color illustration. September 1986.

Fellowships in Residence at the Smithsonian Institution: Rockefeller Foundation Residency Program in the Humanities 1987--1988. 1 color illustration. September 1986.

SERIES PUBLICATIONS

Smithsonian Contributions to Anthropology

32. Vance C. Haynes, Jr., and George A. Agogino. "Geochronology of Sandia Cave." 32 pages, 7 figures, 2 tables. April 21, 1986.

Smithsonian Contributions to Botany

- 58. Aaron Goldbert. "Classification, Evolution, and Phylogeny of the Families of Dicotyledons." 314 pages, 164 figures, 2 tables. August 22, 1986.
- 60. Lyman B. Smith, Dieter C. Wasshausen, Jack Golding, and Carrie E. Karegeannes. "Begoniaceae, Part I: Illustrated Key; and Part II: Species List." 548 pages, 1183 figures. July 25, 1986.
- 61. Pamela Burns-Balogh and V.A. Funk. "A Phylogenetic Analysis of the Orchidaceae." 79 pages, 94 black-and-white figures, 4 color plates. March 26, 1986.
- 63. John J. Wurdack. "Atlas of Hairs of Melastomataceae." 80 pages, 244 figures. May 30, 1986.

Smithsonian Contributions to Paleobiology

58. Richard Cifelli and George Scott. "Stratigraphic Record of the Neogene Globorotalid Radiation (Planktonic Foraminiferida)." 101 pages, 43 figures. February 11. 1986.

59. Daryl P. Domning, Clayton E. Ray, and Malcolm C. McKenna. "Two New Oligocene Demostylians and a Discussion of Tethytherian Systematics." 56 pages, 23 figures. May 28, 1986.

Smithsonian Contributions to Zoology

- 413. David W. Steadman. "Holocene Vertebrate Fossils from Isla Floreana, Galapagos." 103 pages, 25 figures, 4 plates, 12 tables. April 17, 1986.
- 415. Louis S. Kornicker. "Sarsiellidae of the Western Atlantic and Northern Gulf of Mexico, and Revision of the Sarsiellinae (Ostracoda: Myodocopina)." 217 pages, 113 figures, 34 plates, 7 tables. April 10, 1986.
- 416. J.F. Gates Clarke. "Pyralidae and Microlepidoptera of the Marquesas Archipelago." 485 pages, 319 figures, 1 table. September 30, 1986.

418. Stephen D. Cairns. "A Revision of the Northwest Atlantic Stylasteridae (Coelenterata: Hydrozoa)." 131 pages, 53 black-and-white figures, 3 tables, 25

maps. 30 May 1986.

419. C.M. Hart. Jr., Lee-Ann Havek, Janice Clark, and William H. Clark. "The Life History and Ecology of the Entocytherid Ostracod Uncinocythere occidentalis (Kozloff and Whitman) in Idaho." 22 pages, 8 black-and-white figures, 11 tables, 24 December 1985.

420. Frank D. Ferrari, "Postnaupliar Development of a Looking-glass Copepod, Pleuromamma xiphias (Gieshrecht, 1889), with Analyses of Distributions of Sex and Asymmetry." 55 pages, 23 black-and-white figures, 9 tables. 8 November

1985.

421. Stanley H. Weitzman and Sara V. Fink. "Xenurobryconin Phylogeny and Putative Pheromone Pumps in Glandulocaudine Fishes (Teleostei: Characidae)." 121 pages, 81 black-and-white figures, 4 tables. 24 December 1985. 422. Jonathan A. Coddington. "The Genera of the Spider Family Theridiosomatidae." 96 pages, 220 black-and-white figures, 8 maps, 1 table.

27 May 1986. 423. John M. Rurns. "Wallengrenia otho and W. egeremet in Eastern North America (Lepidoptera: Hesperiidae: Hesperiinae)." 39 pages, 66 black-and-white

figures. 4 tables. 24 December 1985.

424. Margaret D. Andolshek and Horton H. Hobbs, Jr. "The Entocytherid Ostracod Fauna of Southeastern Georgia." 43 pages, 20 black-and-white figures, 3 tables. 12 February 1966.

425. Louis S. Kornicker. "Cylindroleherididae of the Western North Atlantic and Northern Gulf of Mexico, and Zongeography of the Myndocopina." 139 pages,

63 black-and-white figures, 6 tables. 14 July 1986.

426. Stephen D. Cairns. "Stylasteridae (Hydrozoa: Hydroida) of the Galapagos Islands." 42 pages, 27 black-and-white figures, 2 tables, 1 map. 26 March 1956.

427. George R. Zug, Addison H. Wynn, and Carol Ruckdeschel. "Age Determination of Loggerhead Sea Turtles, Caretta caretta, by Incremental Growth Marks in the Skeleton." 34 pages, 9 black-and-white figures, 6 tables. 25 July 1986.

428. Marian H. Pettibone. "Review of the Iphioninae (Polychaeta: Polynoidae) and Revision of Iphione cimex Quatrefages, Gattyana deludens Fauvel, and Harmathoe iphionelloides Johnson (Harmothoinae)." 43 pages, 15 hlack-and-white

figures. 23 August 1986.

429. Ronald J. McGinley. "Studies of Halictinae (Apoidea: Halictidae). I: Pevision of New Vorld Lasioglossom Curtis." 294 pages, 746 black-and-white figures, 4 tables. 14 July 1986.

43U. Mayne N. Mathis. "Studies of Psilopinae (Diptera: Ephydridae), I: A Pevision of the Shore Fly Genus Placopsidella Kertesz." 3U pages, 34

black-and-white figures. 30 May 1986. 431. John G. Robinson. "Seasonal Variation in Use of Time and Space by the Medge-capped Capuchin Monkey Cebus olivaceus: Implications for Foraging Theory." 60 pages, 23 black-and-white figures, 16 tables. 23 June 1986. 432. Fenner A. Chace, Jr. "The Caridean Shrimps (Crustacea: Decapoda) of the Albatross Philippine Expedition, 1907-1910, Part 4: Families Oplophoridae and Nematocarcinidae." 82 pages, 42 black-and-white figures. 11 September 1986. 433. aymond R. Manning and Ch. Lewinsohn. "Notes on Some Stomatopod Crustacea from the Sinai Peninsula, Red Sea." 19 pages, 4 black-and-white figures, 4 tables. 12 May 1986.

434. Donald R. Davis. "A New Family of Monotrysian Moths from Austral South America (Lepidoptera: Palaephatidae), with a Phylogenetic Review of the Monotrysia." 203 pages, 508 figures, 15 maps, 3 tables. 14 July 1986. 435. Maureen E. Downey. "Revision of the Atlantic Brisingida (Echinodermata: Asteroidea), with Description of a New Genus and Family." 57 pages, 24 black-and-white figures. 30 September 1986. 436. Karl V. Krombein and Wojciech J. Pulawski. "Biosystematic Studies of Ceylonese Wasps, XVI: A Revision of Gastrosericus Spinola (Hymenoptera: Sphecoidea: Larridae)." 20 pages, 34 black-and-white figures. 21 April 1986. 438. Robert P. Higgins and Reinhardt Mobjerg. "New Loricifera from Southeastern United States Coastal Waters." 70 pages, 87 black-and-white figures, 1 map. 7 April 1986. 439. Amnon Freidberg and Wayne M. Mathis. "Studies of Terelliinae (Diptera: Tephritidae): A Revision of the Genus <u>Neaspilota</u> Osten Sacken." 75 pages, 204 black-and-white figures. 2 September 1986. 440. Helga Schiff, Bernard C. Abbott, and Raymond B. Manning. "Optics, Range-Finding, and Neuroanatomy of the Eye of a Mantis Shrimp, Squilla mantis (Linnaeus) (Crustacea: Stomatopoda: Squillidae)." 32 pages, 19 hlack-and-white figures, 1 table. 9 July 1986. 441. Marian H. Pettibone. "Additions to the Family Eulepethidae Chamberlin (Polychaeta: Aphroditacea)." 51 pages, 42 black-and-white figures. 12 September 1986.

Smithsonian Studies in History and Technology

46. Emilie Savage-Smith with Andrea P.A. Beloli. "Islamicate Celestial Globes: Their History, Construction, and Use." 354 pages, 3 color and 84 black-and-white figures, 7 tables. 20 January 1986. 47. D.A. Flentrop (trans. by John Fesperman). "The Organs of Mexico City Cathedral." 53 pages, 28 black-and-white figures. 11 September 1986.

DIRECT-MAIL PUBLICATIONS

Books

Kopper, Philip. The Smithsonian Book of North American Indians. 288 pages, 315 color and 27 black-and-white illustrations, 12 maps. Retail: \$50.00; Associates: \$29.97. September 1986.

Recordings

Virtuosi. 7 LPs accompanied by a 159-page booklet containing 43 black-andwhite illustrations. Retail: \$54.96; Associates: \$49.96. January 1986. Uorks of V. A. Mozart. 6 LPs accompanied by a 64-page booklet containing
21 black-and-white illustrations. Retail: \$54.96; Associates: \$49.96. August 1986.

The Mount Calvary Church Organ. 1 LP. Retail: \$9.90; Associates: \$8.99.

Appendix 6

Publications of the Staff of the Smithsonian Institution and Its Subsidiaries in Fiscal Year 1986

JOSEPH HENTY PAPERS

- Rothenberg, M., and Reingold, N. "The Exploring Expedition and the Smithsonian Institution." In <u>Magnificent Voyages: The U. S. Exploring Expedition</u>, 1838-1842 (1985): 243-253. Edited by H. J. Viola and C. Margolis. Washington, D. C: Smithsonian Institution Press.
- Theerman, P. "James Clerk Maxwell and Religion." American Journal of Physics 54 (1986): 312-317.

NATIONAL ZOOLOGICAL PARK

Director

Press.

Robinson, M. H. 1985. Tropical forests, informational complexity, conservation and the modern zoo. In Zoom Op Zoo Antwerp Zoo Focusing on Arts and Sciences, ed. C. Kruyhooft, pp. 55-69. Royal Zoological Society of Antwerp. . 1985. Alternatives to destruction: investigations into the use of tropical forest resources with comments on repairing the effects of destruction. The Environmental Professional, Vol. 7, pp. 232-239. . 1985. The fate of the tropics: are things as bad as they seem; and, if so, what can be done? In Proceedings of the American Association of Zoological Parks and Aquariums Annual Conference 1985, pp. 33-37. . 1985. The function of the modern zoo and the future of the tropics. In Proceedings of the International Union of Directors of Zoological Gardens Annual Conference 1985, pp. 150-160. . 1985. Predator-prev interactions, informational complexity, and the origins of intelligence. In Journal of the Washington Academy of Sciences, Vol. 75, No. 4, pp. 91-104. . 1986. Zoos today and tomorrow. In American Association of Zoological Parks and Aquariums 1986 Regional Proceedings, pp. 527-531. Robinson, B. C. and Robinson, M. H. 1985. Resources available to tropical predators on tree trunks and under trees. In Ecology and Resource Management in the Tropics, ed. K. C. Misra, pp. 97-102. Bhargava Book Depot, India. Robinson, M. H., Robinson, B. C., Murphy, F. M. and Corley, W. S. 1986. Egg-sac burying behavior in Nephila maculata: a specialized

adaptation. In <u>Proceedings of the Ninth International Congress of Arachnology</u>, <u>Panama</u>, 1983, eds. W. G. Eberhard, Y. D. Lubin and B. C. Robinson, pp. 245-254. Washington, D. C.: Smithsonian Institution

Animal Departments

- Bingaman, L. E. and Ballou, J. D. 1986. Demographic analysis for captive populations: Spreadsheet programs. Office of the Conservation Coordinator. American Association of Zoological Parks and Aquariums.
- Davis, B. 1986. Ritualized combat behavior in Dumerils monitors. Herpetology Review 17:in press.
- Demeter, B. J. 1986. Combat behavior in the gila monster (Heloderma suspectum). Herpetology Review 17:9-11.
- Gould, E. and Bres, M. 1986. Regurgitation and reingestion in captive gorillas: description and intervention. Zoo Biology 5:241-250.
- Gould, E., and Bres, M. 1986. Regurgitation in gorillas: possible model for human eating disorders (rumination/bulimia). <u>Journal of</u>
 Development and Behavioral Pediatrics in press.
- Marcellini, D. L. and Schettino, L. R. 1986. Some aspects of the natural history of the Cuban lizard, <u>Anolis lucius</u>. <u>Herpetology Review</u> 17:in press.
- White, J., Marcellini, D. L. and Barry, S. 1986. Learning about reptiles and amphibians: a family experience. <u>Museum Educators Rountable</u>
 Reports 11:3-4.

Department of Animal Health

- Bush, M. 1986. Laparoscopy and surgery. In Zoo and Wild Animal Medicine, 2nd ed., ed. M. E. Fowler, pp. 254-261. Philadelphia: W. B. Saunders Company.
- Bush, M., Phillips, L. G. and Montali, R. J. 1986. Clinical management of captive tigers. In <u>The Global Tiger Survival Plan</u>, eds. U. S. Seal and R. Tilson, in press. Park Ridge: Noyes Publications.

 Chaudhuri, M., Kleiman, D. G., Wildt, D. E., Bush, M., Frank, E. S. and
- Chaudhuri, M., Kleiman, D. G., Wildt, D. E., Bush, M., Frank, E. S. and Thau, R. B. 1986. Urinary steroid levels during natural and induced estrus, pregnancy and pseudopregnancy in the giant panda.

 Proceedings: Society for the Study of Reproduction, Suppliment 1, 34:146.
- Diehl, J. R., Stuart, L. D., Goodrowe, K. L. and Wildt, D. E. 1986.

 Effects of Altrenogest and exogenous gonadotropins on ovarian
 function and embryo recovery in an inbred strain of miniature pig as
 influenced by the occurrence of cystic endometrial hyperplasia.
 Biology of Reproduction in press.
- Goodrowe, K. L., Howard, J. G. and Wildt, D. E. 1986. Embryo recovery and quality in the domestic cat: Natural versus induced estrus.

 Proceedings: International Embryo Transfer Society, Theriogenology 25:156.
- Howard, J. G., Bush, M. and Wildt, D. E. 1986. Semen collection, analysis and cryopreservation in nondomestic mammals. Current Therapy in Theriogenology, ed. D. Morrow, pp. 1047-1053. Philadelphia: W. B. Saunders Company.
- Howard, J. G., Bush, M., de Vos, V., Schiewe, M. C., Pursel, V. G. and Wildt, D. E. 1986. Influence of cryoprotective diluent on post-thaw viability and acrosomal integrity of spermatozoa from the African elephant (Loxodonta africana). Journal of Reproduction and Fertility, in press.

- James, A. E., Bush, M., Heller, R. M. and Falke, H. M. 1986. X-ray diagnosis of diseases in exotic animals. Swara, East African Wildlife Society 9:33-34.
- Montali, R. J. and Wallace, R. 1986. A review of some diseases of aquatic species related to captivity. Proceedings: 28th International Symposium on Diseases of Zoo and Wild Animals, pp. 5-12. Rostock, East Germany.
- O'Brien, S. J., Collier, G. E., Benveniste, R. E., Nash, W. G., Newman, A. K., Simonson, J. M., Eichelberger, M. A., Seal, U. S., Janssen, D., Bush, M. and Wildt, D. E. 1986. Setting the molecular clock in Felidae: the great cats, <u>Panthera</u>. In <u>The Global Tiger Survival Plan</u>, eds. U. S. Seal and R. Tilman, in press. Park Ridge: Noyes Publications.
- O'Brien, S. J., Wildt, D. E. and Bush, M. 1986. The cheetah in genetic peril. Scientific American 254:84-92.
- Schiewe, M. C., Schmidt, P. M. and Wildt, D. E. 1986. Toxicity potential of ethylene oxide residues in straw containers used for embryo cryopreservation. Proceedings: <u>International Embryo Transfer Society</u>, <u>Theriogenology</u> 25:194.
- Schmidt, P. M. and Wildt, D. E. 1986. Influence of sucrose concentration and dilution sequence on culture viability of thawed embryos from four mouse genotypes. Proceedings: <u>International Embryo Transfer Society</u>, Theriogenology 25:195.
- Wildt, D. E. 1986. Estrous cycle control in the cat: induction and prevention. In <u>Current Therapy in Theriogenology</u>, ed. D. Morrow, in press. Philadelphia: W. B. Saunders Company.
- ______. 1986. Laparoscopy for reproductive evaluation in the dog and cat.

 In Reproduction in the Dog and Cat, ed. T. J. Burke, in press. Santa
 Barbara: American Veterinary Publications, Incorporated.
- . 1986. Semen, sperm metabolism, collection and artificial insemination in nonhuman primates. In <u>Comparative Primate Biology:</u>

 <u>Vol. V. Endocrinology, Reproduction and Development, ed. W. R.</u>

 Dukelow, in press. New York: Alan R. Liss, Incorporated.
- Wildt, D. E. and Goodrowe, K. L. 1986. The potential of applying embryo technology to the black-footed ferret. In <u>The Reproductive Biology of the Black-Footed Ferret</u>, ed. U. S. Seal, in press. New Haven: Yale University Press.
- Wildt, D. E., Howard, J. G., Chakraborty, P. K. and Bush, M. 1986. The reproductive physiology of the clouded leopard. II. A circannual analysis of adrenal-pituitary-testicular relationships during electroejaculation or after an adrenocorticotropin hormone challenge. Biology of Reproduction 34:949-959.
- Wildt, D. E., Howard, J. G., Hall, L. L. and Bush, M. 1986. The reproductive physiology of the clouded leopard. I. Electroejaculates contain high proportions of pleiomorphic spermatozoa throughout the year. Biology of Reproduction 34:937-947. Wildt, D. E., Phillips, L. G., Simmons, L. G., Goodrowe, K. L., Howard, J.
- Wildt, D. E., Phillips, L. G., Simmons, L. G., Goodrowe, K. L., Howard, J. G., Brown, J. L. and Bush, M. 1986. Seminal-endocrine characteristics of the tiger and the potential for artificial breeding. In <a href="https://doi.org/10.1001/jheps.new-normalized-normal
- Wildt, D. E., Schiewe, M. C., Schmidt, P. M., Goodrowe, K. L., Howard, J. G., Phillips, L. G., O'Brien, S. J. and Bush, M. 1986. Developing animal model systems for embryo technologies in rare and endangered wildlife. Theriogenology 25:33-51.

- Berger, J. 1986. Wild Horses of the Great Basin: Social Competition and Population Size. Chicago: University of Chicago Press.
- Collins, L. R. 1986. Big Foot of the Branches. Zoogoer 15:15-18.
- . 1986. The National Zoological Park Conservation and Research Center. Proceedings of the American Association of Zoological Parks and Aquariums Regional Conference pp. 688-690.
- Collins, L. R. and Conway, K. 1986. A Quoll by Any Other Name. Zoogoer 15(1):14-16.
- Cunningham, C. and Berger, J. 1986. Wild Horses of the Granite Range.

 Natural History 95:32-40.
- Derrickson, S. R. 1986. A cooperative breeding program for the Guam rail (Rallus owstoni). Proceedings of the American Association of Zoological Parks and Aquariums Annual Conference 1985:233-240.
- _____. 1986. Captive propagation of the Guam rail -- an update. Philadelphia Zoo Review 2(2):19-23.
- Poduschka, W. and Wemmer, C. 1986. Observations on chemical communication and its glandular sources in selected insectivors. In <u>Olfactory Communication Symposium</u>, eds. D. Duvall and D. Muller-Schwarze. Laramie, Wyoming.
- Wemmer, C., Mishra, H. R. and Dinnerstein, E. 1985. Unusual use of trunk for sound production in a captive Asian elephant: a second case.

 <u>Journal of the Bombay Natural History Society</u> 82:187.
- Wemmer, C. and Stiwe, M. 1985. Reducing deer populations in large enclosures with drives. Wildlife Society Bulletin 13:245-248.
- Wemmer, C. and Watling, D. 1986. Ecology and status of the Sulawesi palm civet (Macrogalidia musschenbroeki Schlegel). Biological Conservation 35:1-17.

Department of Pathology

- Alvarado, T. and Montali, R. J. 1985. Persistant right aortic arch and aberrant left subclavian artery in a Père David's deer. <u>Journal of the American Veterinary Medical Association</u> 187:11, pp. 1285.
- Alvarado, T. and Montali, R. J. 1985. Diagnosis of radiographs of a male cusimanse with onset of lethargy, anorexia, and oral hemorrhage.

 Journal of the American Veterinary Medical Association 187:11, pp. 1286.
- Bush, M., Montali, R. J., Phillips, L. G., Alvarado, T. P. and Ravich, W. J. 1985. Acute hemorrhagic enteritis in a male giant panda. <u>Bongo</u> (<u>Proceedings of the International Symposium on the Giant Fanda</u>), Berlin 10.
- Bush, M., Montali, R. J., Phillips, L. G., Citino, S. B., Boch, G. and Ruley, E. J. 1985. Anemia and renal failure in a giant panda (Ailiropoda melanoleuca). Bongo (Proceedings of the International Symposium on the Giant Panda), Berlin 10.
- Citino, S. B., Bush, M., Phillips, L. G., Montali, R. J., Wang, K. P. and Ravich, W. J. 1985. Eosinophilic enterocolitis in a juvenile crangutan. Journal of the American Veterinary Medical Association 187:11, p. 1279.

- Citino, S. B., Montali, R. J., Bush, M. and Philips, L. G. 1985.

 Nutritional myopathy in a captive California sea lion. <u>Journal of</u>
 the American Veterinary Medical Association 187:11, p. 1232.
- Dean, F. J., Carpenter, J. W., Clark, G. G., Montali, R. J., Crabbs, C. L., Tsai, T. F. and Docherty, D. E. 1986. Mortality of captive whooping cranes caused by eastern equine encephalitis virus. <u>Journal of the American Veterinary Medical Association</u> in press.
- Knight, J. A., Bush, M., Celma, M., Garcia del Campo, A. L., Goltenboth, R., Hearn, J. P., Hodges, J. K., Jones, D. M., Klos, H. G., Monsalva, L., Montali, R. J. and Moore, H. D. M. 1985. Veterinary aspects of reproduction in the giant panda. <u>Bongo (Proceedings of the International Symposium on the Giant Panda)</u>, Berlin 10.
- Montali, R. J., Allen, G., Bryans, J., Phillips, L. G. and Bush, M. 1985. Equine herpesvirus type 1 abortion in an onager and suspected herpesvirus myelitis in a zebra. <u>Journal of the American Veterinary</u> Medical Association 187:11, pp. 1248-1249.
- Montali, R. J., Freeman, R. A., Collins, L., Wammer, C. and Bush, M. 1985.

 Pathology survey of captive cervids at the National Zoological Park.

 XXVII Internationalen Symposium uper dei Erkrankungen der Zootiere.

 Turin.
- Montail, R. J., Phillips, L. G., Bush, M. and Apple, M. J. G. 1986.

 Canine distemper vaccine trials in nondomestic carnivores. Poster narrative. Proceedings of a Symposium, Exotic Animals in the Eighties in press. British Veterinary Zoological Society.
- Montali, R. J. and Wallace, R. 1986. A review of some diseases of aquatic species related to captivity. XXVIII Internationalen Symposium uber die Erkrankungen der Zootiere. Rostock, pp. 5-12.
- Nichols, D. K., Campbell, V. and Montali, R. J. 1986. Pansteatitis in great blue herons. <u>Journal of the American Veterinary Medical Association</u> in press.
- Nichols, D. K., Montali, R. J., Phillips, L. G., Alvarado, T. P., Bush, M., and Collins, L. 1986. <u>Parelaphostrongylus tenuis</u> in captive reindeer and sable antelcpe. <u>Journal of the American Veterinary Medical Association</u> 188:6, pp. 619-621.
- Partington, C. and Montali, R. J. 1986. <u>Capillaria hepatica</u> in Kirk's dik-dik (<u>Madoqua kirkii</u>). <u>Journal of Zoo Animal Medicine</u> in press.
- Rideout, B., Montali, R. J., Phillips, L. G. and Gardiner C. 1986.

 Tortoise mortalities due to viviparous nematodes of the family

 Atractidae (Travassas, 1919) genus <u>Proatractis</u> (Caballero, R., 1971).

 Journal of Wildlife <u>Diseases</u> in press.

Department of Zoological Research

- Baer, D. J., Oftedal, O. T. and Fahey, G. C. 1985. Feed selection and digestibility by captive giraffe. Zoo Biology 4:7-64.
- Beck, B. B., Dietz, J. M., Kleiman, D. G., Castro, M. I., Sa, R. L. and Luz, V. L. In press. Reintrodução de micos-leoes dourados (Leontopithecus rosalia Linnaeus, 1776) (Callitrichidae, Primates) em seu ambiente natural (Reintroduction of golden lion tamarins into their natural habitat). In <u>A Primatologia no Brasil, 2: Anais do Segundo Congresso Brasileiro de Primotologia, 1985</u> ed. Milton Thiago de Mello. Sociedade Brasileira de Primatologia.

- Beissinger, S. 1986. Demography, environmental uncertainty, and the evolution of mate desertion in the snail kite. Ecology in press.
- 1986. Anisogamy overcome: female strategies in snail kites. American Naturalist in press.
- Boness, D. J. 1986. Invited book review of Fur seals: Maternal Strategies on Land and at Sea, eds. R. L. Gentry and G. L. Kooyman. Marine Mammal Science in press.
- . 1986. The role of zoos in the conservation of marine mammals. In Proceedings of the Symposium on Endangered Marine Animals and Marine Parks, ed. E. G. Silas, in press.
- Bowen, W. D., Boness, D. J. and Oftedal, O. T. In press. Mass transfer from mother to pup and subsequent mass loss by the weaned pup in the hooded seal, Cystophora cristata. Canadian Journal of Zoology.
- Bowen, W. D., Boness, D. J. and Oftedal, O. T. 1985. Birth to weaning in 4 days: remarkable growth in the hooded seal, Cystophora cristats. Canadian Journal of Zoology 63:2841-2846.
- Buckley, P. A., Foster, M. S., Morton, E. S., Ridgely, R. S. and Buckley, F. G. eds. 1985. Neotropical Ornithology. American Ornithologists! Union Monograph No. 36. Washington, D. C.: American Ornithologists' Union.
- Davidar, P. and Morton, E. S. 1986. The relationship between fruit crop sizes and fruit removal rates by birds. Ecology 67:262-265.
- Derrickson, K. 1986. Behavioral correlates of song types of the northern mockingbird Mimus polyglottos. Ethology in press.
- . 1986. Which sex leads in paired mallards? Wilson Bulletin in press.
- 1986. Yearly and situational changes in the estimate of repertoire size in northern mockingbirds (Mimus polyglottos). Auk in press.
- Dietz, J. M. Coimbra-Filho, A. F. and Pessamilio, D. M. 1986. Projeto mico leao, um modelo para a conservaçoa de especie ameacada de extinção (The golden lion tamarin project as a model for the conservation of an endangered species). In A Primatologia no Brasil, 2: Anais do Segundo Congresso Brasileiro de Primotologia, 1985 ed. Milton Thiago de Mello. Sociedade Brasileira de Primatologia.
- Dietz, L. A. and Nagagata, E. Y. 1986. Programa de educação para a conservação do mico-leao-dourado: O Desenvolvimento e Avaliação de Educação como uma Tecnologia Eficiente para a Conservação de uma Especia em Extinção (An Education Program for the Conservation of the Golden Lion Tamarin: The Development and Evolution of Education as an Efficient Technique for the Conservation of an Endangered Species). In A Primatologia no Brasil, 2: Anais do Segundo Congresso Brasileiro de Primotologia, 1985 ed. Milton Thiago de Mello. Sociedade Brasileira de Primatologia.
- Dietz, L. A. 1985. Brazilian Sanctuary. Zoogoer 14(4):4-7.

 1985. Captive-Born Golden Lion Tamarins Released into the Wild: A Report from the Field. Primate Conservation 6:21-27.
- Forman, L. M., Kleiman, D. G., Bush, M., Ballou, J. D., Phillips, L. G., Dietz, J. M., Coimbra-Filho, A. F. and O'Brien, S. J. 1986. Genetic variation within and among lion tamarins. American Journal of Physical Anthropology in press.

- Forman, L. M., Kleiman, D. G., Dietz, J. L. and Coimbra-Filho, A. F. 1986.

 Genetic variation in Leontopithecus, a critically endangered polytypic primate. In Genetic Research with Nonhuman Primates:

 Serving the Needs of Mankind. San Antonio: S. W. Foundation Forum (Abstract).
- Freed, L. M., York, C. M., Hamosh, M., Sturman, J. T., Oftedal, O. T. and Hamosh, P. 1986. Bile sale stimulation lipase: the enzyme is present in nonprimate milk. In <u>Human Lactation</u>, Vol. 2, <u>Maternal-Environmental Factors</u>, eds. M. Hamosh and A. S. Goldman. New York: Plenum Press.
- Gittleman, J. L. 1986. Carnivore brain size, behavioral ecology, and phylogeny. <u>Journal of Mammalogy</u> 67(1):23-26.
- ______. 1986. Carnivore life history patterns: allometric, phylogenetic, and ecological associations. American Naturalist 127(6):744-771.
- Gittleman, J. L. and Oftedal, O. T. In press. Comparative growth and lactation energetics in carnivores. Symposia of the Zoological Society of London.
- Gradwohl, J. and Greenberg, R. 1986. Warbler Watchers. Zoogoer 15(2):15-16.
- Greenberg, R. 1985. A comparison of foliage discrimination ability in a specialized and generalized tropical migrant wood warbler. <u>Canadian</u>
 <u>Journal of Zoology</u> 63:673-676.
- . 1986. Competition in migrant birds in the nonbreeding season. In Current Ornithology, ed. R. Johnston, 3:281-307. New York: Plenum Publishing Corporation.
- _____. 1986. Development of dead leaf foraging in a tropical migrant warbler. Ecology in press.
- . 1986. Seasonal foraging specialization in the worm-eating warbler, a neotropical migrant warbler. Condor in press.
- . 1986. Social facilitation does not reduce neophobia in chestnutsided warblers <u>Dendroica pensylvanica</u>. <u>Journal of Ethology</u>, in press.
- . 1986. The social behavior and foraging ecology of migrant birds in the tropics. In <u>Proceedings of the International Ornithological Congress XVII</u>. Moscow.
- Greenberg, R. and Gradwohl, J. 1985. A comparative study of the social behavior of antwrens on Barro Colorado Island, Panama. American Ornithologists' Union Monograph 36:445-455.
- Greenberg, R. and Gradwohl, J. 1986. Constant density and stable territoriality in some tropical insectivorous birds. Oecologia 69:618-625.
- Hand, J. L. 1986. Egalitarian resolution of social conflicts: a study of pair-bonded gulls in nest duty and feeding context. Zeitschrift for Tierpsychologie 70:123-147.
- Harvey, P. H. and Ralls, K. 1986. Is incest avoided? Nature 320:575-576. Kleiman, D. G. 1984. Review of M. F. Small, ed. Female Primates: Studies by Women Primatologists. Alan R. Liss, Inc., NY 1984. American Scientist 73:203-204.
- . 1985. Criteria for the evaluation of zoo research projects. Zoo Biology 4:93-98.
- . 1985. Paternal Care in New World Primates. American Zoology 25(No. 23):857-859.

1985. Social and Reproductive Behavior of the Giant Panda (Ailuropoda melanolenca). Bongo (Proceedings of the International Symposium on the Giant Panda), Berlin 10:45-58. Kleiman, D. G., Beck, B. B., Dietz, J. M., Ballou, J. and Coimbra-Filho, A. F. 1985. A Conservation Program for Golden Lion Tamarins. Proceedings of the 1985 Annual Meeting of the American Association of Zoological Parks and Aquariums pp. 60. Kleiman, D. G., Beck, B. B., Dietz, J. M., Dietz, L. A., Ballou, J. D. and Coimbra-Filho, A. F. In press. Conservation program for the golden lion tamarin: captive research and management, ecological studies, educational strategies, and reintroduction. In Primates: The Road to Self-sustaining Populations, ed. K. Benirschke, pp. 959-979. Springer-Verlag. Kleiman, D. G., Hoage, R. J. and Green, K. M. 1986. Behavior of the Golden Lion Tamarin, Leontopithecus rosalia rosalia. In Ecology and Behavior of Neotropical Primates eds. R. A. Mittermeier and A. F. Coimbra-Filho. Kleiman, D. G. and Seidensticker, J. 1985. Review of G. S. Schaller, et al., Giant Pandas of Wolong. University of Chicago Press, 1985. 298 pp. Science 228(No. 4701):875-876. Kohn, F. A preliminary analysis of space use, body orientation and tail use in captive ringtail possums (Pseudochierus peregrinus). Paper presented at 1985 National Conference of the American Association of ZooKeepers, Miami, Florida. _. 1986. Ghost monkey. Zoogoer 15(4):19-21. . 1986. The National Zoo's Department of Zoological Research: a three-tiered philosophy to zoo research. Paper presented at the 1986 National Conference of the American Association of Zookeepers, Winnipeg, Canada. Lumpkin, S. 1986. Going bats. Zoogoer 15(1):17-18. ______ 1986. The elephant-shrew...by a nose. Zoogoer 15(2):8-10. . 1986. Relics of pre-history. Zoogoer 15(3):16-17. 1986. Spectacular spectacled bears. Zoogoer 15(4):4-6. Lumpkin, S. and Koontz, F. W. 1986. Social and sexual behavior of the rufous elephant-shrew Elephantulus rufescens in captivity. Journal of Mammalogy 67(1):112-119. Lynch, J. F., Morton, E. S. and Van der Voort, M. 1985. Habitat segregation between the sexes of wintering hooded warblers (Wilsonia citrina). The Auk 102(4):714-721. Morton, E. S. 1985. Vocal imitation in a captive purple martin. Wilson Bulletin 97(3):392-395. . 1985. The realities of reintroducing species to the wild. In Animan Extinctions, ed. R. J. Hoage, pp. 147-158. Washington: Smithsonian Press. . 1985. Book Review of A Laboratory Manual of Ornithology by Olin Sewall Pettingill. Audubon Naturalist News Vol. 11, October, 1985. . 1985. Book Review of The Clapper Rail by Brooke Meanley. Audubon Naturalist News Vol. 11, October, 1985.

. 1986. Predictions from the ranging hypothesis for the evolution

. In press. Sound symbolism and its role in nonhuman vetebrate communication. In Sound Symbolism and Human Speech, eds. J. Chala,

of long distance signals in birds. Behaviour in press.

L. Hinton and J. Nichols. Cambridge University Press.

- . In press. Reintroducing birds as a method of studying them. In Restoration Ecology -- A Synthetic Approach to Ecological Research, eds. J. Gilpin and Aber. Cambridge University Press.
- _____. 1986. Variation in mate guarding intensity by male purple martins. <u>Behaviour</u> in press.
- Morton, E. S., Gish, S. L. and Van der Voort, M. 1986. On the learning of degraded and undegraded songs in the Carolina wren. Animal Behaviour 34:815-820.
- Morton, E. S., Lynch, J. F., Young, K. and Mehlhop, P. 1986. Do male hooded warblers exclude females from nonbreeding territories in tropical forest? The Auk in press.
- Morton, E. S. and Young, K. 1986. A previously undescribed method of song matching in a species with a single song "type", the Kentuckey warbler Oporornis formosus. Ethology 72:in press.
- Nicoll, M. and Thompson, S. D. 1986. The energetics of reproduction in therian mammals: didelhids and tenrecs. Symposia of the Zoological Society of London 1986 in press.
- Oftedal, O. T. 1985. Pregnancy and Lactation. In <u>Bioenergetics of Wild Herbivores</u>, eds. R. J. Hudson and R. G. White, pp. 215-238. Boca Raton, Florida: CRC Press.
- _____. 1986. Comparative aspects of milk composition and quantity.

 Proceedings, XIII International Congress of Nutrition in press.

 Brighton, England.
- . 1986. Growth rate and milk composition: a critical appraisal.

 In The Breast Fed Infant: A Model for Performance. Report of the Ninety-First Ross Conference on Pediatric Research. Columbus, Chic: Ross Laboratories. In press.
- . 1986. Milk intake in relation to body size. In <u>The Breast Fed</u>

 Infant: A Model for Performance. Report of the Ninety-First Ross

 Conference on Pediatric Research. Columbus, Chio: Ross
 Laboratories. In press.
- Oftedal, O. T. and Boness, D. J. In press. Considerations in the use of fish as food. In <u>Proceedings of the 3rd Annual Dr. School Conference on Nutrition of Captive Wild Animals</u>. Linclon Park Zoological Gardens, Chicago, Illinois.
- Oftedal, O. T., Boness, D. J. and Tedman, R. 1986. The behavior, physiology and anatomy of lactation in the Pinnipedia. In <u>Current Mammalogy</u>, Vol. 1, ed. H. Genoways, in press.
- Pinder, L. 1986. Avaliação Tecnica de Translocação em <u>Leontopithecus</u>
 rosalia (Linnaeus, 1766) (Callitrichidae, Primates) (Technical
 Evolution of Translocation in <u>Leontopithecus rosalia</u>). In <u>A</u>
 Primatologia no Brasil, 2: <u>Anais do Segundo Congresso Brasileiro de</u>
 Primatologia, 1985, ed. Milton Thiago de Mello. Sociedade Brasileira
 de Primatologia.
- Porton, I. J., Kleiman, D. G. and Rodden, M. In press. Aseasonality of bush dog reproduction and the influence of social factors on the estrous cycle. <u>Journal of Mammalogy</u>.
- Ralls, K. and Ballou, J. D. 1986. Proceedings of the Workshops on Genetic Management of Captive Populations. Zoo Biology 5(2):81-86.
- Ralls, K. and Ballou, J. D. 1986. Captive breeding programs for populations with a small number of founders. Trends in Ecology & Evolution (TREE) 1(1):19-22.

- Ralls, K., Harvey, P. H., and Lyles, A. M. 1986. Inbreeding in natural populations of birds and mammals. Conservation Biology 3:35-56.
- Ralls, K., Kranz, K. and Lundrigan, B. 1986. Mother-young relationships in captive ungulates: variability and clustering. <u>Animal Behaviour</u> 34:134-145.
- Rappole, J. H. and Morton, E. S. 1985. Effects of habitat alteration on a tropical avian forest community. In <u>Neotropical Ornithology</u>, eds. P. Buckley, M. S. Foster, E. S. Morton, R. S. Ridgely and F. Buckley, pp. 1013-1021. American Ornithologists' Union Monograph, No. 36.
- Rappole, J. H. and Morton, E. S. In press. The status of North American migrants living in Mexico and Central America. In Symposium on migrant birds, ed. B. Bertram. Proceedings of the 1986 World Conference, International Council for Bird Preservation, Kingston, Ontario.
- Roberts, M. 1985. The management and husbandry of the western tarsier

 Tarsius bancanus at the National Zoological Park. Proceedings of the

 American Association of Zoological Parks and Aquariums Annual

 Meeting, pp. 466-473.
- Roberts, M., Brand, S. and Maliniak, E. 1985. The biology of captive prehensile tailed porcupines, <u>Coendou prehensilis</u>. <u>Journal of Mammalogy</u> 6(3)6:476-482.
- Roberts, M. and Cunningham, B. 1986. Space and substrate use in captive western tarsiers, <u>Tarsius bancanus</u>. <u>International Journal of Primatology 7(2):113-130.</u>
- Roberts, M., Koontz, F., Phillips, L. G. and Maliniak, E. In press.

 Management and husbandry of the prehensile tailed porcupine, Coendou prehensilis, at the National Zoological Park and the New York Zoological Society. International Zoo Yearbook.
- Robinson, J. G. 1986. Seasonal variation in use of time and space by wedge-capped capuchin monkey, <u>Cebus olivaceus</u>: implications for foraging theory. <u>Smithsonian Contributions to Zoology</u> 431:1-60.
- Rumpler, W. V., Allen, M. E., Ullrey, D. E., Earle, R. D., Schmitt, S. M. and Cooley, T. M. In press. Body composition of white-tailed deer estimated by deuterium oxide dilution. Canadian Journal of Zoology
- estimated by deuterium oxide dilution. Canadian Journal of Zoology.
 Schryver, H. F., Oftedal, O. T., Williams, J., Cymbaluk, N. F., Antezak, D. and Hintz, H. F. 1986. A comparison of the mineral composition of milk and domestic and captive wild equids Equus przewalski, E. zebra, E. burchelli, E. caballus, E. asinus. Comparative Biochemistry and Physiology. In press.
- Schryver, H. F., Oftedal, O. T., Williams, J., Soderholm, L. V. and Hintz, H. F. 1986. Lactation in the horse: the mineral composition of mare's milk. Journal of Nutrition. In press.
- Shy, E. 1986. Individuality in the mating call of the treefrog Hyla arborea savignyi. Amphibia-Reptilia 6:343-353.
- Shy, E., McGregor, P. K. and Krebs, J. R. 1986. Discrimination of song types by male great tits. <u>Behavioural Processes</u> 13:1-12.
- Shy, E. and Morton, E. S. 1986. Adaptation of amplitude structure of songs to propagation in field habitat in song sparrows. Ethology 72:177-184.
- Shy, E. and Morton, E. S. 1986. The role of distance, familiarity, and time of day in Carolina wrens' responses to cospecific songs.

 <u>Behavioral Ecology and Sociobiology</u>. In press.

- Sieber, O. J. 1986. Acoustic recognition between mother and cubs in raccons <u>Procycn lotor</u>. <u>Behaviour</u> pp. 130-163.
- Tasse, J. 1986. Maternal and paternal care in the rock cavy, <u>Kerodon</u>
 rupestris, a South American hystricomorph rodent. <u>Zoo</u> <u>Biology</u> 5:2743
- Thompson, K. V. 1985. Seasonal patterns of food consumption in two North American felids, the mountain lion (Felis concolor) and the bobcat (Felis rufus). Animal Keepers' Forum 12(4):135-137.
- Thompson, K. V. and Cranford, J. A. 1985. Social play and escalation into agonism among unfamiliar juvenile punares (Thrichomys apereoides).

 American Zoologist 25:77A (abstract).
- Thompson, S. D. 1986. Body size, duration of parental care, and the intrinsic rate of natural increase in eutherian and metatherian mammals. Oecologia (Berlin). In press.
- . 1986. Resource availability and microhabitat utilization by Mojave Desert Merriam's kangaroo rats, <u>Dipodomys merriami</u>. <u>Journal of Mammalogy</u>. In press.
- Thompson, S. D. and Gittleman, J. 1986. Energetics of reproduction in mammals: allocation of energy. American Zoogoer in press.
- Thompson, S. D. and Nicoll, M. E. 1986. Basal metabolic rate and the energetics of reproduction in therian mammals. Nature 321:690-693.
- Ullrey, D. E. and Allen, M. E. 1986. Principles of Zoo Mammal Nutrition. In Zoo and Wild Animal Medicine, ed. M. E. Fowler, pp. 515-532. Philadelphia: W. B. Saunders Company.
- Wilson, S., Miller, L., Hursey, M., Frantz, M. and Gorte, J. 1985. The social development of a captive grey seal <u>Halichoerus grypus</u> pup for the first six months. Aquatic Mammals 11.3:89-100.

Office of Public Affairs

- Hoage, R. J., ed. 1986. Animal Extinctions: What Everyone Should Know. Washington, D. C.: Smithsonian Institution Press.
- Lyon, M., Goldman, L. and Hoage, R. 1985. Parent-offspring conflict following a birth in a primate, <u>Callimico goeldii</u>. <u>Animal Behaviour</u> Vol. 33. No. 4. pp. 1364-1365.

OFFICE OF AMERICAN STUDIES

Washburn, Wilcomb E. "The American Indian in U.S. Society," American Studies Newsletter, U.S. Information Service, American Embassy, Bonn, Germany, no. 6 (May 1985), pp. 26-32. "Expand U.S. Policy Against Nicaragua," Columns page, The Miami News, September 5, 1985. "Response to Biolsi," American Anthropologist 87(3), September 1985, p. 659. "History Died a Little at Stuttgart," Perspectives: American Historical Association Newsletter, vol. 23, no. 9, December 1985, pp. 4-5. "Professionalizing the Muses," Museum News, Vol. 64, No. 2, December 1985, pp. 18-25, 70-71. "Emotion and Reason in American Indian Studies," Sociologus, Vol. 35, No. 2, 1985, pp. 178-183. "Land Claims in the Mainstream of Indian/White Land History," chapter in Irredeemable America: The Indians' Estate and Land Claims, edited by Imre Sutton (Albuquerque: University of New Mexico Press, 1985), pp. 21-33. "The Canary Island and the Question of the Prime Meridian: The Search for Precision in the Measurement of the Earth," pp. 873-888, V Coloquio de Historia Canario-Americana (1982) Coloquio Internacional de Historia Maritima, Tomo IV, Francisco Morales Padron, ed. (Gran Canaria: Excma. Mancomunidad Provincial Interinsular de Cabildos de Las Palmas y del Excmo. Cabildo Insular de Gran Canaria, 1985). . The Assault on Indian Tribalism: The General Allotment Law (Dawes Act) of 1887 (Philadelphia: Lippincott, 1975), pp. viii + 79. Reprint Edition, Robert E. Krieger Publishing Company, Melbourne, Florida, 1986. . Contribution to discussion on "The IRA Record and John Collier," pp. 101-109 in Kenneth R. Philp, ed., Indian Self-Rule: First-Hand Accounts of Indian-White Relations from Roosevelt to Reagan (Salt Lake City: Howe Brothers, 1986).

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

- Aaronson, M.; Bothun, G. D.; Mould, J. R.; Huchra, J. P.; Schommer, R. A.; and Cornell, M.E. "A Distance Scale from the Infrared Magnitude/H I Velocity Width Relation V. Distance Moduli to Ten Galaxy Clusters, Positive Detection of Bulk Supercluster Motion Toward the Microwave Anisotropy, and the Global Value of the Hubble Constant." Astrophysical Journal 302 (1986): 536.
- Aguilar, L. A., and White, S. D. M. "The Density Profiles of Tidally Stripped Galaxies."

 <u>Astrophysical Journal</u> 307 (1986): 97.
- Allison, A. C.; Guberman, S. L.; and Dalgarno, A. "A Model of the Schumann-Runge System of O₂." <u>Journal of Geophysical Research</u> 91(10) (1986): 193.
- Ambruster, C.; Sciortino, S.; and Golub, L. "Rapid X-Ray Variability in Einstein Observations of K and M Dwarfs." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds. D. M. Gibson and M. Zeilik, p. 219. New York: Springer-Verlag, 1986.</u>
- Avni, Y., "Quasar Evolution and Luminosity Function: An X-Ray Perspective." In Structure and Evolution of Active Galactic Nuclei, eds. G. Giuricin, F. Mardirossian, M. Mezzetti, and M. Ramella, p. 397. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- ——. "X-Ray Properties of QSOs and Their Cosmological Implications." Annals of the New York Academy of Sciences 470 (1986): 71.
- Avni, Y., and Tananbaum, H. "X-Ray Properties of Optically Selected QSOs." Astrophysical Journal 305 (1986): 83.
- Avrett, E. H.; Machado, M. E.; and Kurucz, R. L. "Chromospheric Flare Models." In <u>The Lower Atmosphere in Solar Flares</u>, ed. D. F. Neidig, p. 216. New Mexico: National Solar Observatory, 1986.
- Baliunas, S. L. "Stellar Activity Cycles." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds.</u> D. M. Gibson and M. Zeilik, p. 3. New York: Springer-Verlag, 1986.
- Baliunas, S. L.; Boyd, L. J.; Genet, R. M.; and Guinan, E. F. "Design of a Dedicated 1.0 Meter System for Automatic Ca II K-Line Photometry of Evolved Stars."

 International Amateur and Professional Photoelectric Photometry Commission 22 (1985): 32.
- Baliunas, S. L.; Criswell, S.; Boyd, L. J.; Genet, R.; and Hall, D. S. "Automatic Photoelectric Telescope Service. III. The Mt. Hopkins Site." International Amateur and Professional Photoelectric Photometry Commission 22 (1985): 47.
- Baliunas, S. L., and Vaughan, A. H. "Stellar Activity Cycles." <u>Annual Review of Astronomy and Astrophysics</u> 23 (1985): 379.
- Bartel, N.; Herring, T. A.; Ratner, M. I.; Shapiro, I. I.; and Corey, B. E. "VLBI Limits on the Proper Motion of the 'Core' of the Superluminal Quasar 3C 345." Nature 319 (1986): 733.
- Bartel, N.; Ratner, M. I.; Shapiro, I. I.; Cappallo, R. J.; Rogers, A. E. E.; and Whitney, A. R. "Investigation of Radiation from Pulsar PSR 0329+54 Using Mark III VLBI Observations." <u>Astronomical Journal</u> 90 (1985): 2532.

- Bartel, N.; Rogers, A. A. E.; Shapiro, I. I.; Gorenstein, M. V.; Gwinn, C. R.; Marcaide, J. M.; and Weiler, K. W. "Hubble's Constant Determined via Very-Long-Baseline Interferometry of a Supernova." Nature 318 (1985): 25.
- Beichman, C.; Myers, P. C.; Emerson, J.; Harris, S.; Mathieu, R.; Benson, P.; and Jennings, R. "Candidate Protostars in Nearby Molecular Cloud Cores." Astrophysical Journal 307 (1986): 337.
- Bienstock, S.; Dalgarno, A.; and Heil, T. G. "Charge Transfer in N^{2+} + H Collisions at Slow to Intermediate Velocities." <u>Physical Review A</u> 33 (1986): 2078.
- Biretta, J. A.; Moore, R. L.; and Cohen, M. H. "The Evolution of the Compact Radio Source in 3C 345. I. VLBI Observations." <u>Astrophysical Journal</u> 308 (1986): 93.
- Biretta, J. A.; Schnieder, D. P.; and Gunn, J. E. "Optical Identifications of Six Compact Double Radio Sources." <u>Astronomical Journal</u> 90 (1985): 2508.
- Blanco, D. R.; Sharp, F. H.; Foltz, C. B.; and Chaffee, F. H., Jr. "The Multiple Mirror Telescope Comparison and Calibration Lamp Illumination System." <u>Publications of the Astronomical Society of the Pacific</u> 98 (1986): 701.
- Bloemhof, E. E.; Danchi, W. C.; and Townes, C. H. "Rapid Variations in the Circumstellar 10 Micron Emission of A Orionis." <u>Astrophysical Journal (Letters)</u> 299 (1985): L37.
- Bloemhof, E. E.; Danchi, W. C.; Townes, C. H.; and Vanderwyck, A. H. B. "10 μm Array Imaging of Circumstellar Dust." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds.</u> D. M. Gibson and M. Zeilik, p. 448. New York: Springer-Verlag, 1986.
- Bodo, G.; Ferrari, A.; Kalkofen, W.; Massaglia, S.; and Rosner, R. "The Atmosphere in a Thin Magnetic Flux Tube." In <u>Theoretical Problems in High Resolution Solar Physics</u>, ed. H. U. Schmidt, p. 185. Munich, Germany: Max-Planck-Institut fur Physik und Astrophysik, 1985.
- Bookbinder, J.; Golub, L.; and Rosner, R. "Highlights of the Einstein Survey of Cool Stars." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds.</u> D. M. Gibson and M. Zeilik, p. 97. New York: Springer-Verlag, 1986.
- Bothun, G. D.; Beers, T. C.; Mould, J. R.; and Huchra, J. P. "A Redshift Survey of Low Surface Brightness Galaxies I. The Basic Data." <u>Astronomical Journal</u> 90 (1985): 2487.
- ——. "A Redshift Survey of Low Surface Brightness Galaxies II. Do They Fill the Voids?" <u>Astrophysical Journal</u> 308 (1986): 510.
- Bradt, H.; Baldwin, J.; Geldzahler, B.; Madejski, G.; Massey, P.; McClintock, J.; McHardy, I.; McMahan, R.; Ohashi, T.; Remillard, R.; Romanishin, W.; Salter, C.; Schaefer, B.; Schwartz, D. A.; Tapia, S.; Thorstenson, J.; Urry, C. M.; Wehinger, P.; Wilson, A.; and Wyckoff, S. "H0323+022: Classification as a BL Lac and EXOSAT Coordinated Observations." Space Science Reviews 40 (1985): 613.
- Caldwell, N.; Kirshner, R. P.; and Richstone, D. O. "The Dynamics of the Elliptical Galaxy NGC 7079 Measured from Gas and Stars." <u>Astrophysical Journal</u> 305 (1986): 136.
- Campbell, A. W., and Smith, L. J. "A Search for Wolf-Rayet Stars in Giant Extragalactic Burst of Star Formation." In <u>Proceedings of International Astronomical Union Symposium No. 116</u>, <u>Luminous Stars and Associations in Galaxies</u>, eds. C. W. H.

- de Loore, A. J. Willis, and P. Laskarides, p. 499. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Candy, M. P., and Marsden, B. G. "IAU Commission 6." In <u>Transcripts of the International Astronomical Union XIXA</u>, p. 13-14, 1985.
- Carney, B. W., and Latham, D. W. "BD -60855: A Mildly Metal-Deficient Dwarf from the Outer Halo." <u>Astrophysical Journal</u> 298 (1985): 803.
- . "The Kinematics of Halo Red Giants." Astronomical Journal 96 (1986): 60.
- Chaffee, F. H. Jr.; Foltz, C. B.; Bechtold, J.; and Weymann, R. J. "On the Abundance of Metals and the Ionization State in Absorbing Clouds Toward QSO's." <u>Astrophysical Journal</u> 301 (1985): 116.
- Chance, K. V.; Lin, F. J.; and Traub, W. A. "Far-infrared Measurements of Stratospheric Trace Gases." In <u>Proceedings of the Seventeenth International Symposium on Free Radicals, (National Bureau of Standards Special Publication No. 716)</u>, ed. K. M. Evenson, p. 166. Washington, D.C.: National Bureau of Standards, 1986.
- Chance, K. V.; Traub, W. A.; Carli, B.; Nolt, I. G.; and Radostitz, J. V. "Far-Infrared Spectroscopy of the Earth's Stratosphere." In <u>Proceedings of AIAA/NASA Earth Observing Systems Conference</u>, AIAA-85-3006. New York: American Institute of Aeronautics and Astronautics, 1985.
- Chapman, G. N. F.; Geller, M. J.; and Huchra, J. P. "The Ultraviolet Variability of Seyfert 1 Galaxies." <u>Astrophysical Journal</u> 297 (1985): 151.
- Chudnovsky, E. M.; Field, G. B.; Spergel, D. N.; and Vilenkin, A. "Superconducting Cosmic Strings." Physical Review D 34 (1986): 944.
- Churchwell, E.; Wood, D.; Myers, P. C.; and Myers, R. "The Excitation, Abundance, and Distribution of HNCO in Sgr B2." <u>Astrophysical Journal</u> 305 (1986): 405.
- Cohen, M. H.; Biretta, J. A.; Scalise, E.; Comoretto, G.; Baath, L.; and Nicholson, G. "Observations of Quasar 3C273 with High North-South Resolution." In Quasars, eds. G. Swarup and V. K. Kapahi, p. 159. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Connor, B. J., and Radford, H. E. "Pressure Broadening of Millimeter-Wave Ozone Lines by Atmospheric Gases." <u>Journal of Molecular Spectroscopy</u> 117 (1986): 15.
- Cornell, J. (editor) The International Popularization of Science: Reporting the News and Effecting Change in the Developing Countries, 50 pp. Cambridge, Massachusetts: International Science Writers Association, 1986.
- Cornell, J., and Carr, J. (editors) <u>Infinite Vistas: New Tools for Astronomy</u>, 302 pp. New York: Charles Scribner's Sons, 1985.
- Cox, D. P., and Raymond, J. C. "Preionization-Dependent Families of Radiative Shock Waves." <u>Astrophysical Journal</u> 298 (1985): 651.
- Crawford, M. K.; Lugten, J. B.; Fitelson, W.; Genzel, R.; and Melnick, G. J. "Observations of Far-Infrared Line Profiles in the Orion-KL Region." <u>Astrophysical Journal (Letters)</u> 303 (1986): L57.
- Dalgarno, A. "Charge Transfer Processes in Astrophysical Plasmas." <u>Nuclear Instruments and Methods in Physics Research</u> B9 (1985): 655.
- ——. "The Chemistry of Shocked Regions in the Interstellar Gas." In Molecular Astrophysics, eds. G. H. F. Diercksen, W. F. Huebner, and P. W. Langhoff, p. 281. Boston: D. Reidel Publishing Company, 1935.
- ——. "Molecular Astrophysics." In Molecular Astrophysics, eds. G. H. F. Diercksen,

- W. F. Huebner, and P. W. Langhoff, p. 3. Boston: D. Reidel Publishing Company, 1985.
- ———. "Is Interstellar Chemistry Useful?" Quarterly Journal of the Royal Astronomical Society 27 (1986): 83.
- Dalgarno, A., and McElroy, M. B. "Photodissociation of Metastable $O_2(a^1\Delta_g)$: Implications for Stratospheric O_3 ." Geophysical Research Letters 13 (1986): 660.
- Davis, J. L.; Herring, T. A.; Shapiro, I. I.; Rogers, A. E. E.; and Elgered, G. K. "Geodesy by Radio Interferometry: Effects of Atmospheric Modeling Errors on Estimates of Baseline Length." <u>Radio Science</u> 20 (1985): 1593.
- Davis, R. J. "Radio Jet and Lobe of 3C 273." In Quasars, eds. G. Swarup and V. K. Kapahi, p. 211. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- de Lapparent, V.; Geller, M. J.; and Huchra, J. P. "A Slice of the Universe." Astrophysical Journal (Letters) 302 (1986): L1.
- de Lapparent, V.; Kurtz, M. J.; and Geller, M. J. "The Shane-Wirtanen Counts: Systematics and Two-Point Correlation Function." <u>Astrophysical Journal</u> 304 (1986): 585.
- Deutsch, L. K., and Willner, S. P. "Far Infrared Luminosities of Markarian Starburst Galaxies." <u>Astrophysical Journal (Letters)</u> 306 (1986): L11.
- Donahue, R. A.; Baliunas, S. L.; Frazer, J.; French, H.; and Lanning, H. "A Flare Event on the Quiet dM Star HD 95735." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds. D. M. Gibson and M. Zeilik, p. 281. New York: Springer-Verlag, 1986.</u>
- Doyle, J. G.; Raymond, J. C.; Noyes, R. W.; and Kingston, A. E. "The Extreme Ultraviolet Spectrum of Sunspot Plumes. II. Spectral Diagnostics and Implications for Cooling." <u>Astrophysical Journal</u> 297 (1985): 816.
- Dupree, A. K. "Mass Loss from Cool Stars." <u>Annual Review of Astronomy and Astrophysics</u> 24 (1986): 377.
- Dupree, A. K.; Baliunas, S. L.; Guinan, E. F.; Hartmann, L.; and Sonneborn, G. "Recent Spectroscopic Observations of Alpha Orionis." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun</u>, eds. D. M. Gibson and M. Zeilik, p. 411. New York: Springer-Verlag, 1986.
- Ekambaram, V.; Davis, A. M.; Hashimoto, A.; and Grossman, L. "Trace Elements in Petrographically Distinct Components of Allende Inclusions." In <u>Lunar and Planetary Science XVI</u>, p. 205. Houston, Texas: Lunar and Planetary Science Institute, 1985.
- Elvis, M. "Current Issues in the X-Ray Properties of AGN," <u>Publications of the Astronomical Society of the Pacific</u> 98 (1986): 148.
- ———. "X-Ray to Infrared Continua of Optically Selected Quasars." In Quasars, eds. G. Swarup and V. K. Kapahi, p. 73. Dordrecht, Holland: D. Reidel Publishing Company, 1986; also in Continuum Emission in Active Galactic Nuclei, ed. M. L. Sitko, p. 25. Tucson, Arizona: Kitt Peak National Observatory, 1986.
- Elvis, M., and Czerny, B. "Opacity and Inclination Effects in Quasar Accretion Disks and the Optical/UV/X-Ray Big Bump." In <u>Continuum Emission in Active Galactic Nuclei</u>, ed. M. L. Sitko, p. 65. Tucson, Arizona: Kitt Peak National Observatory, 1986.
- Esser, R.; Leer, E.; Habbal, S. R.; and Withbroe, G. L. "A Two-Fluid Solar Wind Model

- with Alfven Waves: Parameter Study and Application to Observations." <u>Journal of Geophysical Research</u> 91 (1986): 2950.
- Evans, N. J., II; Levreault, R. M.; and Harvey, P. M. "Far-Infrared Photometry of Low-Mass Pre-Main-Sequence Stars with Broad CO Wings." <u>Astrophysical Journal</u> 301 (1986): 894.
- Fabbiano, G. "The X-Ray Properties of Normal Galaxies." <u>Publications of the Astronomical Society of the Pacific</u> 98 (1986): 525.
- Fabbiano, G.; Elvis, M.; Carleton, N. P.; Willner, S. P.; Lawrence, A.; and Ward, M. J. "0.3 to 100 μm Continua of Seyfert 1 Galaxies." In Quasars, eds. G. Swarup and V. K. Kapahi, p. 85. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Fabbiano, G.; Willner, S. P.; Carleton, N. P.; and Elvis, M. "The Highly Obscured Nucleus of 3C 219." <u>Astrophysical Journal (Letters)</u> 304 (1986): L37.
- Fabian, A.; Arnaud, K. A.; Nulsen, P. E. J.; Watson, M. G.; Steward, G. C.; McHardy, I.; Smith, A.; Cooke, B.; Elvis, M.; and Mushotzky, R. F. "An X-Ray Optical and Radio Study of PKS 0745-191: A Massive Cooling Flow." Monthly Notices of the Royal Astronomical Society 216 (1985): 923.
- Fabricant, D.; Beers, T. C.; Geller, M. J.; Gorenstein, P.; Huchra, J. P.; and Kurtz, M. J. "An X-Ray and Optical Study of the Cluster of Galaxies A754." <u>Astrophysical Journal</u> 308 (1986) 530.
- Fabricant, D.; Conroy, M.; Cohen, L.; and Gorenstein, P. "Automated Figure Formation for a Kirkpatrick-Baez X-Ray Mirror." In <u>Grazing Incidence Optics</u>, eds. J. Osantowski and L. Van Speybroeck, SPIE vol. 640, p. 164. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986.
- Fazio, G. G.; Koch, D. G.; Melnick, G. J.; Tresch-Fienberg, R. M.; Willner, S. P.; Gezari, D. Y.; Lamb, G.; Shu, P.; Chin, G.; Silverberg, R.; Mather, J.; Hoffmann, W. F.; Woolf, N. J.; Pipher, J.; Forrest, W.; and McCreight, C. R. "Wide Field and Diffraction Limited Array Camera for SIRTF." In <u>Cryogenic Optical Systems and Instruments II</u>, ed. R. K. Melugin, SPIE vol. 619, p. 59. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986; also in <u>Instrumentation for Optical Remote Sensing from Space</u>, eds. J. Seeley, J. W. Lear, A. Monfils, and S. L. Russak, SPIE vol. 589, p. 229. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986.
- Feigelson, E. D.; Bradt, H.; McClintock, J.; Remillard, R.; Urry, C. M.; Tapia, S.; Geldzahler, B.; Johnston, K.; Romanishin, W.; Wehinger, P. A.; Wyckoff, S.; Madejski, G.; Schwartz, D. A.; Thorstensen, J.; and Schaefer, B. E. "H0323+022: A New BL Lacertae Object with Extremely Rapid Variability." <u>Astrophysical Journal</u> 302 (1986): 337.
- Ferrari, A.; Massaglia, S.; Kalkofen, W.; Rosner, R.; and Bodo, G. "The Equilibrium Structure of Thin Magnetic Flux Tubes. I." <u>Astrophysical Journal</u> 298 (1985): 181.
- Ferrari, A.; Trussoni, E.; Rosner, R.; and Tsinganos, K. "On Wind-Type Flows in Astrophysical Jets. II. Propagation Outside the Nucleus, and the Case of M87."

 <u>Astrophysical Journal</u> 300 (1986): 577.
- ——. "Collimated Winds from Active Galactic Nuclei." In <u>Structure and Evolution of Active Galactic Nuclei</u>, eds. G. Giuricin, F. Mardirossian, M. Mezzetti, and M. Ramella, p. 543. Dordrecht, Holland: D. Reidel Publishing Company, 1986.

- Field, G. B. "Astronomy of the Twentieth Century." <u>American Scientist</u> 74 (1986): 172.
- Tools for Astronomy, eds. J. Cornell and J. Carr, p. 254. New York: Charles Scribner's Sons, 1985.
- ——. "Magnetic Helicity in Astrophysics." In <u>Magnetospheric Phenomena in Astrophysics (American Institute of Physics Conference Proceedings 144)</u> eds. R. I. Epstein and W. C. Feldman, p. 324. Los Alamos: Los Alamos Scientific Laboratory, 1986.
- ——. "Theory of the Interstellar Medium." In <u>Highlights of Modern Astrophysics:</u>
 <u>Concepts and Controversies</u>, eds. S. L. Shapiro and S. A. Teukolsky, p. 235. New York: John Wiley & Sons, Inc., 1986.
- Field, G. B., and Spergel, D. N. "Cost of Space-Based Laser Ballistic Missile Defense." Science 231 (1986): 1387.
- Fireman, E. L. "Uranium-Series Dating of Allan Hills Ice." <u>Lunar and Planetary Science</u> XVI Part 1 (1985): 240.
- ——. "Dating Antarctic Ice by the Carbon-14 and Uranium-238 Series Methods." Antarctic Journal of the United States 19(5) (1985): 66.
- ——. "Uranium-Series Dating of Allan Hills Ice." <u>Journal of Geophysical Research</u> 91(B4) (1986): D539.
- ——. "Uranium-Series Dates for Ice from Two Allan Hills Locations." <u>Lunar and Planetary Science XVII</u> Part 1 (1986): 226.
- Fireman, E. L.; Cleveland, B. T.; Davis, R. Jr., and Rowley, J. K. "Cosmic-Ray Depth Studies at the Homestake Mine with $^{39}K/^{37}Ar$ Detectors." In <u>AIP Conference Proceedings</u>, eds. M. L. Cherry, L. Lande, and W. A. Fowler, vol. 26, p. 22. New York: American Institute of Physics, 1985.
- Foltz, C. B.; Chaffee, F. H. Jr.; and Weymann, R. J. "Limits on the Surface Brightness of the 'Lyman Alpha Disk' Absorbers Toward the QSOs PHL 957 and MC 1331+170." <u>Astronomical Journal</u> 92 (1986): 247.
- Foltz, C. B.; Weymann, R. J.; Peterson, B. M.; Sun, L.; Malkan, M. A.; and Chaffee, F. H. Jr. "C IV Absorption Systems in QSO Spectra: Is the Character of Systems with Zabs ~ Zem Different from those with Zabs ;< Zem?" <u>Astrophysical Journal</u> 307 (1986): 504.
- Fox, J. L., and Dalgarno, A. "The Vibrational Distribution of N₂⁺ in the Terrestrial Ionosphere." <u>Journal of Geophysical Research</u> 90 (1985): 7557.
- Franceschini, A.; Gioia, I. M.; and Maccacaro, T. "Comparison between Optically Selected and X-Ray Selected Active Galactic Nuclei." In <u>Structure and Evolution of Active Galactic Nuclei</u>, eds. G. Giuricin, F. Mardirossian, M. Mezzetti, and M. Ramella, p. 547. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- ———. "On the Relationship Between Optically Selected and X-Ray Selected Active Galactic Nuclei." <u>Astrophysical Journal</u> 301 (1986): 124.
- Garay, G.; Moran, J. M.; and Reid, M. J. "Radio Emission from ⊕¹A Orionis." In Radio Stars, eds. R. M. Hjellming and D. M. Gibson, p. 131. Dordrecht, Holland: D. Reidel Publishing Company, 1985.
- Garcia, M.; Grindlay, J. E.; Burg, R., Murray, S. S.; and Flanagan, J. "Development of the EXITE Detector: A New Imaging Detector for 20-300 keV Astronomy." IEEE

- Transactions on Nuclear Science 33 (1986): 735.
- Gardner, L. D.; Graff, M. M.; and Kohl, J. L. "Fast Beams Apparatus for the Study of Photodissociation Processes." Review of Scientific Instruments 57 (1986): 177.
- Gardner, L. D.; Kohl, J. L.; Lafyatis, G. P.; Young, A. R.; and Chutjian, A. "An Experimental Apparatus for Photon/Ion Coincidence Measurements of Dielectronic Recombination." Review of Scientific Instruments 57 (1986): 2254.
- Geary, J. C.; DaCosta, L. N.; and Nunes, M. A. "The Observatorio Nacional Intensified Photon-Counting Reticon Detector." Revista de Fisica Aplicada e Instrumentacao 1 (1985): 1.
- Gehrels, T.; Marsden, B. G.; McMillan, R. S.; and Scotti, J. V. "Astronomy with a Scanning CCD." <u>Astronomical Journal</u> 91 (1986): 1242.
- Geller, M. J.; de Lapparent, V.; and Kurtz, M. J. "The Galaxy Distribution and the Large-Scale Structure of the Universe." In <u>Twelfth Texas Symposium on Relativistic Astrophysics</u>, eds. M. Livio and G. Shaviv, p. 123. New York: New York Academy of Sciences, 1986.
- Gezari, D. Y.; Tresch-Fiendberg, R.; Fazio, G. G.; Hoffmann, W. F.; Gatley, I.; Lamb, G.; Shu, P.; and McCreight, C. "8.3 and 12.4 Micron Imaging of the Galactic Center Source Complex with the Goddard Infrared Array Camera." <u>Astrophysical Journal</u> 299 (1985): 1007.
- Gingerich, O. "Halley's Letter to Gregory Concerning the 'Synopsis." <u>Journal for the History of Astronomy</u> 16 (1985): 223.
- . "Islamic Astronomy." Scientific American 254(4) (1986): 74.
- . "Newton, Halley, and the Comet." Sky and Telescope 71 (1986): 230.
- -----. "Halley and Harvard." Harvard Magazine 88(3) (1986): 63.
- ——. "Galileo's Astronomy." In <u>Reinterpreting Galileo</u>, ed. W. Wallace, p. 111. Washington, D.C.: Catholic University of America Press, 1986.
- ——. "Copernicus' <u>De Revolutionibus</u>: An Example of Renaissance Scientific Printing." In <u>Print and Culture in the Renaissance</u>, eds. G. P. Tyson and S. S. Wagonheim, p. 55. Newark, Delaware: Associated University Presses, 1986.
- Gingerich, O., and Welther, B. "Harlow Shapley and the Cepheids." Sky and Telescope 70(6) (1985): 540.
- Gioia, I. M.; Maccacaro, T.; Schild, R.; Giommi, P.; and Stocke, J. T. "New X-Ray and Optical Observations of the X-Ray Discovered QSO-Galaxy Pair 1E0104.2+3153." Astrophysical Journal 307 (1986): 497.
- Gioia, I. M.; Maccacaro, T.; Schild, R.; Stocke, J.; and Danziger, J. "The Medium Sensitivity Survey and the X-Ray Selected Quasar Sample." In <u>Quasars</u>, eds. G. Swarup and V. K. Kapahi, p. 233. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Giommi, P.; Barr, P.; Gioia, I. M.; Maccacaro, T.; Schild, R.; Garilli, B.; and Maccagni, D. "Rapid X-Ray and Optical Variability in the X-Ray Selected BL Lac Object 1E1402.3+0416." <u>Astrophysical Journal</u> 303 (1986): 596.
- Giommi, P.; Gioia, I. M.; and Maccacaro, T. "EXOSAT Observations of the QSO-Galaxy Pair 1E0104.2+3153." Space Science Reviews 40 (1985): 627.
- Gorenstein, P.; Cohen, L.; and Fabricant, D. "X-ray Telescope Module for the LAMAR

- Space Shuttle Experiment." In X-Ray Instrumentation in Astronomy, ed. J. L. Culhane, SPIE vol. 597, p. 128. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986.
- Gorenstein, P., and Fabricant, D. "An Imaging Proportional Counter for a 0.1-10 keV X-Ray Telescope." IEEE Transactions on Nuclear Science NS-33 (1986) 741.
- Gorham, P. W.; Cawley, M. F.; Fegan, D. J.; Gibbs, K. G.; Lamb, R. C.; Liebing, D. F.; Porter, N. A.; Stenger, V. J.; and Weekes, T. C. "Pulsed TeV Gamma Rays Detected from Hercules X-1 During X-Ray Source Eclipse." <u>Astrophysical Journal (Letters)</u> 308 (1986): L11.
- Green, D. W. E. (editor). International Comet Quarterly 7 (1985): 1-108.
- . (editor). International Comet Quarterly 8 (1986); 1-72.
- Grindlay, J. E.; Garcia, J.; Burg, R.; and Murray, S. S. "The Energetic X-Ray Imaging Telescope Experiment (EXITE)." <u>IEEE Transactions on Nuclear Science</u> 33(1) (1986): 750.
- Grossi, M. D. "Measurements of the Propagation Parameters for Real-Time Channel Evaluation (RTCE) System." In <u>Propagation Impact on Modern HF Communications System Design (NATO-AGARD, Lecture Series No. 145)</u>, p. 7-1. Paris, France: Advisory Group for Aerospace Research and Development, 1986.
- ———. "An Introduction to Error-Control Coding, With Applications to H. F. Communications." In <u>Propagation Impact on Modern HF Communications System Design (NATO-AGARD, Lecture Series No. 145)</u>, p. 12-1. Paris, France: Advisory Group for Aerospace Research and Development, 1986.
- Grossman, L., and Hashimoto, A. "Experimental Condensation of Crystalline Olivine and Pyroxene." <u>Lunar and Planetary Science XVI</u>, p. 304 (revision Supplement A27). Houston, Texas: Lunar and Planetary Science Institute, 1985.
- Guberman, S. L. "Theoretical Studies of Dissociative Recombination." In <u>Thermophysical Aspects of Re-Entry Flows</u>, p. 225. New York: American Institute of Aeronautics and Astronautics, 1986.
- Guth, A. H. "The New Inflationary Universe, 1984." In <u>Inner Space/Outer Space: The Interface Between Cosmology and Particle Physics</u>, eds. E. W. Kolb, M. S. Turner, K. Olive, D. Seckel, and D. Lindley, p. 287. Chicago, Illinois: Chicago University Press, 1986.
- Guth, A. H., and Pi, S.-Y. "The Behavior of the Higgs Field in the New Inflationary Universe." In <u>Inner Space/Outer Space: The Interface Between Cosmology and Particle Physics</u>, eds. E. W. Kolb, M. S. Turner, K. Olive, D. Seckel, and D. Lindley, p. 345. Chicago, Illinois: Chicago University Press, 1986.
- ——. "The Quantum Mechanics of the Scalar Field in the New Inflationary Universe." Physical Review D 32 (1985): 1899.
- Gwinn, C. R.; Herring, T. A.; and Shapiro, I. I. "Geodesy by Radio Interferometry: Studies of the Forced Nutations of the Earth II: Interpretation." <u>Journal of Geophysical Research</u> 91 (1986): 4755.
- Gwinn, C. R.; Taylor, J. H.; Weisberg, T. A.; and Rawley, L. A. "Measurement of Pulsar Parallaxes by VLBI." <u>Astronomical Journal</u> 91 (1986): 338.
- Habbal, S. R.; Ronan, R. S.; and Withbroe, G. L. "Spatial and Temporal Variations of Solar Coronal Loops." Solar Physics 98 (1985): 323.
- Habbal, S. R.; Ronan, R. S.; Withbroe, G. L.; Shevgaonkar, R., and Kundu, M. "Solar

- Coronal Bright Points Observed with the VLA." <u>Astrophysical Journal</u> 306 (1986): 740.
- Harmon, J. K.; Campbell, D. B.; Head, J. W.; Bindschadler, D. L.; and Shapiro, I. I. "Radar Altimetry of Mercury: A Preliminary Analysis." <u>Journal of Geophysical Research</u> 91 (1986): 385.
- Harris, D. E., and Stern, C. P. "The X-Ray Jet in 3C273." In <u>Quasars</u>, eds. G. Swarup and V. J. Kapahi, p. 275. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Hartmann, L. "Manifestations of the Interaction between Convection and Rotation in Stellar Atmospheres." In <u>Transactions of the International Astronomical Union</u>, <u>Reports on Astronomy</u>, ed. R. M. West, p. 507. Dordrecht, Holland: D. Reidel Publishing Company, 1985.
- . "Mass Loss from Solar-Type Stars." Solar Physics 100 (1985): 587.
- ———. "Theories of Mass Loss from T Tauri Stars." <u>Fundamentals of Cosmic Physics</u> 11 (1986): 279.
- Hartmann, L., and Kenyon, S. J. "On the Nature of FU Orionis Stars." <u>Astrophysical Journal</u> 299 (1985): 462.
- Hashimoto, A., and Grossman, L. "SEM-Study of Allende Fine-Grained Inclusions."

 <u>Lunar and Planetary Science XVI</u>, p. 323. Houston, Texas: Lunar and Planetary Institute, 1985.
- ———. "Relationship between Petrography and Silicon Isotopes in Allende Coarse-Grained Inclusions." Meteoritics 20 (1985): 658.
- Hashimoto, A.; Hinton, R. W.; Davis, A. M.; Grossman, L.; Mayeda, T. K.; and Clayton, R. N. "A Hibonite-Rich Murchison Inclusion with Anomalous Oxygen Isotopic Composition." <u>Lunar and Planetary Science XVII</u>, p. 317. Houston, Texas: Lunar and Planetary Science Institute, 1986.
- Herring, T. A.; Gwinn, C. R.; and Shapiro, I. I. "Geodesy by Radio Interferometry: Corrections to the IAU 1980 Nutation Series." In <u>Proceedings of the International Conference on Earth Rotation and the Terrestrial Reference Frame</u>, ed. I. I. Mueller, p. 307. Columbus, Ohio: Ohio State University Report, 1985.
- ———. "Geodesy by Radio Interferometry: Studies of the Forced Nutations of the Earth, 1. Data Analysis." <u>Journal of Geophysical Research</u> 91 (1986): 4745.
- Herring, T. A.; Shapiro, I. I.; Clark, T. A.; Ma, C.; Ryan, J. W.; Schupler, B. R.;
 Knight, C. A.; Shaffer, D. B.; Vandenberg, N. R.; Cappallo, R. J.; Hinteregger, H.
 F.; Rogers, A. E. E.; Webber, J. C.; Whitney, A. R.; Elgered, G.; Rönnäng, B.
 O.; Corey, B. E.; and Davis, J. L. "Geodesy by Radio Interferometry: Evidence for Contemporary Plate Motion." Journal of Geophysical Research 91 (1986): 8341.
- Hester, J. J.; Raymond, J. C.; and Danielson, G. E. "A Deep Hα Image of Faint Balmer-Line Filaments in the Northeast Cygnus Loop Supernova Remnant." <u>Astrophysical Journal (Letters)</u> 303 (1986): L17.
- Horne, J. H., and Baliunas, S. L. "A Prescription for Period Analysis of Unevenly Sampled Time Series." Astrophysical Journal 302 (1986): 757.
- Huchra, J. P. "On the Determination of Cosmological Parameters." In <u>Innerspace/Outerspace</u>, eds. D. Lindley and E. Kolb, p. 65. Chicago, Illinois: University of Chicago Press, 1986.
- Johnson, B. C.; Smith, P. L.; and Parkinson, W. H. "Transition Probability of the Al

- II 2669 Å Intersystem Line." Astrophysical Journal 308 (1986): 1013.
- Kalkofen, W.; Rosner, R.; Ferrari, A.; and Massaglia, S. "The Equilibrium Structure of Thin Magnetic Flux Tubes. II." <u>Astrophysical Journal</u> 304 (1986): 519.
- Karovska, M.; Nisenson, P.; and Noyes, R. "On the α Orionis Triple System." Astrophysical Journal 308 (1986): 260.
- Karovska, M.; Nisenson, P.; Noyes, R.; and Stachnik, R. "Companions to α Orionis." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds.</u> D. M. Gibson and M. Zeilik, p. 445. New York: Springer-Verlag, 1986.
- Keller, H. U.; Arpigny, C.; Barbieri, C.; Bonnet, R. M.; Cazes, S.; Coradini, M.;
 Cosmovici, C. B.; Delamers, W. A.; Huebner, W. F.; Hughes, D. W.; Jamar, C.;
 Malaise, D.; Reitsema, A. J.; Schmidt, H. U.; Schmidt, W. K. H.; Seige, P.; Whipple,
 F. L.; and Wilhelm, K. "First Halley Multicolor Imaging Results from Giotto."
 Nature 321 (1986): 320.
- Kenyon, S. J. "Spectroscopic Observations of PU Vulpeculae." <u>Astronomical Journal</u> 91 (1986): 563.
- . The Symbiotic Stars. Cambridge, England: Cambridge University Press, 1986. Kenyon, S. J., and Garcia, M. R. "Spectroscopic Orbits for Symbiotic Stars. I. The Recurrent Nova T Coronae Borealis." Astronomical Journal 91 (1986): 125.
- Keto, E. R., and Myers, P. C. "CO Observations of Southern High Latitude Clouds." Astrophysical Journal 304 (1986): 466.
- Kohl, J. L.; Weiser, H.; Withbroe, G. L.; Noci, G.; and Munro, R. H. "Coronal Spectroscopy and Imaging from Spartan During the Polar Passage of Ulysses." In <u>The Sun and the Heliosphere in Three Dimensions</u>, ed. R. G. Marsden, p. 39. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Kornacki, A. S., and Wood, J. A. "Mineral Chemistry and Origin of Spinel-Rich Inclusions in the Allende CV3 Chondrite." Geochimica et Cosmochimica Acta 49 (1985): 1219.
- ———. "The Identification of Group II Inclusions by Electron Probe Microanalysis." Earth and Planetary Science Letters 72 (1985): 74.
- Krauss, L. M. "Axions, the Search Continues..." In <u>High Energy Physics 1985: Proceedings of the Yale Theoretical Advanced Study Institute</u>, eds. M. Bowick and F. Grsey, p. 431. Singapore: World Scientific, 1986.
- Krauss, L. M.; Cabrera, B.; and Wilczek, F. "Bolometric Detection of Neutrinos." Physical Review Letters 55 (1985): 25.
- Krauss, L. M.; Freese, K.; Spergel, D. N.; and Press, W. H. "Cold Dark Matter Candidates and the Solar Neutrino Problem." <u>Astrophysical Journal</u> 299 (1985): 1001.
- Krauss, L. M.; Guth, A. H.; Spergel, D. N.; Field, G. B.; and Press, W. H. "Inflation and Shadow Matter." Nature 319 (1986): 748.
- Krauss, L. M.; Morris, D.; Moody, J.; and Wilczek, F. "Calculations for Cosmic Axion Detection." Physical Review Letters 55 (1985): 1797.
- Krauss, L. M., and Wilczek, F. "Solar Neutrino Oscillations." Physical Review Letters 55 (1985): 122.
- Krauss, L. M.; Wilczek, F.; and Srednicki, M. "Solar System Constraints on Dark Matter Candidates." Physical Review D 33 (1986): 2079.

- Krolik, J. H., and Raymond, J. C. "Radiation Pressure-Driven Shocks in Winds from Hot Stars." Astrophysical Journal 298 (1985): 660.
- Kurucz, R. L. "Theoretical Stellar Energy Distributions." In <u>Highlights of Astronomy</u>, ed. J. P. Swings, p. 827. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Kwok, T. L.; Guberman, S. L.; Dalgarno, A.; and Posen, A. "Dipole Moments and Transition Probabilities of the $a^3\Sigma_g^+ b^3\Sigma_u^+$ System of Molecular Hydrogen." <u>Physical Review</u> 34(3) (1986): 1962.
- Latham, D. W. "Giant Telescopes and Tall Mountains: New Directions in Optical Astronomy." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 21. New York: Charles Scribner's Sons, 1985.
- Lawrence, A.; Watson, M. G.; Pounds, K. A.; and Elvis, M. "Continuous Rapid Variability and Spectral Changes in NGC 4051." Monthly Notices of the Royal Astronomical Society 217 (1985): 685.
- Lecar, M., and Aarseth, S. J. "A Numerical Simulation of the Formation of the Terrestrial Planets." <u>Astrophysical Journal</u> 305 (1986): 564.
- Lester, J. B.; Gray, R. O.; and Kurucz, R. L. "Theoretical UVBYβ Indices." Astrophysical Journal Supplement 61 (1986): 509.
- Lightman, A. P. "First Light: The Space Telescope." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 3. New York: Charles Scribner's Sons, 1985.
- Loeser, J. G.; Baliunas, S. L.; Guinan, E. F.; Mattei, J. A.; and Wacker, S. "Light Velocity and Hα Variations in the Pulsating Red Giant V CVn." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds.</u> D. M. Gibson and M. Zeilik, p. 460. New York: Springer, 1986.
- Lorenzini, E. C. "A Three-Mass Tethered System for Micro-g/Variable-g Applications." In <u>Proceedings of the AIAA Guidance Navigation and Control Conference</u>, AIAA-86-1990-CP, p. 1. Williamsburg, Virginia: American Institute of Aeronautics and Astronautics, 1986.
- ——. "Applications of Tethers in Space." In <u>Workshop Proceedings, Venice, Italy</u> (NASA Conference Publication No. 2422), vol. 1, p. 285. Washington, D.C.: National Aeronautics and Space Administration, 1986.
- Loughran, L.; McBreen, B.; Fazio, G. G.; Rengarajan, T. N.; Maxson, C. W.; Serio, S.; Sciortino, S.; and Ray, T. P. "Multiband Far-Infrared Observations of the NGC 6334 Complex." <u>Astrophysical Journal</u> 303 (1986): 629.
- Maccagni, D.; Barr, P.; Garilli, B.; Gioia, I. M.; Giommi, P.; Maccacaro, T.; and Schild, R. "X-Ray Selected BL Lac Objects: Time Variability and X-Ray Spectrum." In Quasars, eds. G. Swarup and V. K. Kapahi, p. 265. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Maccacaro, T., and Gioia, I. M. "On the Completeness of the Medium Sensitivity Survey Quasar Sample." Astrophysical Journal 303 (1986): 614.
- Maccacaro, T.; Gioia, I. M.; Maccagni, D.; and Stocke, J. T. "The Properties of X-Ray Selected BL Lac Objects." In <u>Structure and Evolution of Active Galactic Nuclei</u>, eds. G. Giuricin, F. Mardirossian, M. Mezzetti, and M. Ramella, p. 615. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- MacKeown, P. K., and Weekes, T. C. "Cosmic Rays from Cygnus X-3." Scientific American 253 (1985): 60.

- MacPherson, G. J.; Grossman, L.; and Hashimoto, A. "Accretionary Rims on Inclusions in the Allende Meteorite." Geochimica et Cosmochimica Acta 49 (1985): 2267.
- Majer, P.; Schmitt, J. H. M. M.; Golub, L.; Harnden, F. R. Jr.; and Rosner, R. "X-Ray Spectra and the Rotation Activity Connection of RS Canus Venaticorum Binaries." Astrophysical Journal 300 (1986): 360.
- Maltby, P.; Avrett, E. H.; Carlsson, M.; Kjeldseth-Moe, O.; Kurucz, R. L.; and Loeser, R. "A New Sunspot Umbral Model and Its Variation with the Solar Cycle." Astrophysical Journal 306 (1986): 284.
- Marcaide, J. M.; Bartel, N.; Cohen, N. L.; Gorenstein, M. V.; Shapiro, I. I.; Corey, B. E.; Rogers, A. E. E.; Bonometti, R. J.; Preston, R. A.; and Romney, J. D. "Simultaneous Dual Wavelength VLBI Observations of the Compact Radio Source Near the Galactic Center." In <u>Active Galactic Nuclei</u>, ed. J. E. Dyson, p. 50. Dover, New Hampshire: Manchester University Press, 1985.
- Marsden, B. G. "Comets, in 1983." Quarterly Journal of the Royal Astronomical Society 27 (1985): 102.
- ——. "The Identification of Minor Planets." In <u>Comets, Asteroids, Meteors, II</u>, eds. C.-I. Lagerkvist, B. A. Lindblad, H. Lundstedt, and H. Rickman, p. 3. Uppsala, Sweden: Uppsala University, 1986.
- ——. Catalogue of Cometary Orbits, 5th Edition, 102 pp. Cambridge, Massachusetts: Minor Planet Center, 1986.
- Magnetic Tape of Observations of Minor Planets and Comets, 5th Edition, 402,348 entries. Cambridge, Massachusetts: Minor Planet Center, 1986.
- ——. "Coordination of Minor Planet Orbital Studies: Past, Present and Future." <u>Celestial Mechanics</u> 37 (1985): 339.
- ——. (editor) Minor Planet Circulars, Nos. 9843-10328, 1985.
- _____. (editor) Minor Planet Circulars, Nos. 10329-10884, 1986.
- Marsden, B. G., and Green, D. W. E. (editors) <u>International Astronomical Union</u> <u>Circulars, Nos. 4087-4156</u>, 1985.
- -----. (editors). International Astronomical Union Circulars Nos. 4157-4233, 1986.
- Marvin, U. B. "Earth: The Water Planet." In <u>The Planets</u>, ed. B. Preiss, p. 35. New York: Bantam Books, 1985.
- ——. "Meteorites, the Moon, and the History of Geology." <u>Journal of Geological</u> <u>Education</u> 34 (1986): 140.
- Marvin, U. B., and Lindstrom, M. M. "Breccia 67015: A Comparison with Other North Ray Crater Ejecta." In <u>Lunar and Planetary Science VXII</u>, p. 518. Houston, Texas: Lunar and Planetary Institute, 1986.
- Massaglia, S.; Ferrari, A.; Bodo, G.; Kalkofen, W.; and Rosner, R. "On Magnetohydrodynamic Thermal Instabilities in Magnetic Flux Tubes." <u>Astrophysical Journal</u> 299 (1985): 769.
- Mattison, E. M.; Vessot, R. F. C.; and Shen, W. "Single State Selection System for Hydrogen Masers." In <u>Proceedings of the 40th Annual Symposium on Frequency Control</u>, p. 422. Philadelphia: Institute of Electrical and Electronics Engineers, 1986.
- Mathieu, R. D. "The Dynamical Evolution of Young Clusters and Associations." In <u>Highlights of Astronomy</u>, ed. J. P. Swings, p. 481. Dordrecht, Holland: D. Reidel Publishing Company, 1986.

- Mazeh, T.; Kieboom, K.; and Heise, J. "A Photometric Study of AM Herculis in the Normal and Reversed Soft X-Ray Modes." Monthly Notices of the Royal Astronomical Society 221 (1986): 513.
- McClintock, J.E. "Accretion Disks in Mass-Exchange Binaries." In <u>Plasma Penetration into Magnetospheres</u>, eds. N. Kylafis, J. Papamastorakis, and J. Ventura, p. 71. Colymbari, Crete: Crete University Press, 1986.
- McClintock, J. E., and Remillard, R.A. "The Black-Hole Binary A0620-00." Astrophysical Journal 308 (1986): 110.
- Melnick, G. J. "Observations of Rotational Transitions of OH from OMC1." In Masers, Molecules, and Mass Outflows in Star Forming Regions, ed. A. D. Haschick, p. 33. Westford, Massachusetts: Haystack Observatory, 1986.
- Melnick, G. J.; Stacey, G. J.; Viscusco, P. J.; and Fuller, C. E. "Observations of the 15.7 micron [C II] Emission from the Galactic H II Regions W3 and W51." <u>Astrophysical Journal</u> 303 (1986): 638.
- Meyer, D. M.; Black, J. H.; Chaffee, F. H. Jr.; Foltz, C. B.; and York, D. G. "An Upper Limit on the Microwave Background Temperature at z = 1.776." <u>Astrophysical Journal (Letters)</u> 308 (1986): L37
- Miller, L.; Longair, M. S.; Fabbiano, G.; Trinchieri, G.; and Elvis, M. "The Gaseous Environment of Double Radio Galaxies." <u>Monthly Notices of the Royal Astronomical Society</u> 215 (1985): 799.
- Molnar, L. A. "The Scattering Size of Cygnus X-3." In <u>Proceedings for National Radio Science Meeting</u>, p. 211. Boulder, Colorado: United States National Committee/International Union of Radio Science, 1986.
- Moran, J. M. "Summary Review." In <u>Masers, Molecules, and Mass Outflows in Star Forming Regions</u>, ed. A. D. Haschick, p. 351. Westford: Haystack Observatory, 1986.
- Morgan, P. J.; King, R. W.; and Shapiro, I. I. "Length of Day and Atmospheric Angular Momentum: A Comparison for 1981-1983." <u>Journal of Geophysical Research</u> 90 (1985): 12,645.
- Murphy, D. C., and Myers, P. C. "CO Emission Structure in the Taurus Molecular Cloud Complex." <u>Astrophysical Journal</u> 298 (1985): 818.
- Myers, P. C. "Dense Cores and Star Formation in Nearby Dark Clouds." In Nearby Molecular Clouds, ed. G. Serra, p. 89. New York: Springer-Verlag, 1985.
- ——. "Molecular Cloud Cores." In <u>Protostars and Planets II</u>, eds. D. Black and M. Matthews, p. 81. Tucson, Arizona: University of Arizona Press, 1985.
- ———. "Young Stars and Dense Cores in Nearby Dark Clouds." In <u>Light on Dark Matter</u>, ed. F. P. Israel, p. 307. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Myers, P. C.; Dame, T. M.; Thaddeus, P.; Cohen R.; Silverberg, R.; Dwek, E.; and Hauser, M. "Molecular Clouds and Star Formation in the Inner Galaxy: A Comparison of CO, H II, and Far Infrared Surveys." <u>Astrophysical Journal</u> 30 (1986): 398.
- Nisenson, P.; Stachnik, R. V.; Karovska, M.; and Noyes, R. "A New Optical Source Associated with T Tauri." <u>Astrophysical Journal (Letters)</u> 297 (1985): L17.
- Noci, G.; Kohl, J. L.; and Withbroe, G. L. "OVI Diagnostics of Solar Wind Generation." In The Sun and the Heliosphere in Three Dimensions, ed. R.G.

- Marsden, p. 53. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Nolt, I. G.; Radostitz, J. V.; Chance, K. V.; Traub, W. A.; Ade, P. A. R.; and Carli, B. "Far-Infrared Radiometer to Map OH in the Middle Atmosphere." In <u>Proceedings of AIAA/NASA Earth Observing Systems Conference</u>, AIAA-85-3007. New York: American Institute of Aeronautics and Astronautics, 1985.
- Noyes, R. W. "Commission 12: Radiation and Structure of the Solar Atmosphere." In <u>Transactions of the International Astronomical Union</u>, <u>Proceedings of the Nineteenth General Assembly (Delhi, 1985)</u>, ed. J. P. Swings, vol. XIXB, p. 133. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- ———. "Solar and Stellar Magnetic Activity." In <u>Physics of the Sun</u>, ed. P. A. Sturrock, p. 125. Dordrecht, Holland: D. Reidel Publishing Company, 1985.
- _____. "Stellar Analogs of Solar Magnetic Activity." Solar Physics 100 (1985): 385.
- Noyes, R. W., and Avrett, E. H. "The Solar Chromosphere." In <u>Spectroscopy of Astrophysical Plasmas</u>, eds. A. Dalgarno and D. Layzer, p. 125. Cambridge, England: Cambridge University Press, 1986.
- Noyes, R. W.; Raymond, J. C.; Doyle, J. G.; and Kingston, A. E. "The Extreme Ultraviolet Spectrum of Sunspot Plumes. I. Observations." <u>Astrophysical Journal</u> 297 (1985): 805.
- Odenwald, S.; Shivanandan, K.; Campbell, M.; Fazio, G.; Schwartz, P.; and Moseley, H. "Far-Infrared and Radio Observations of DR-6, DR-7, and DR-22." <u>Astrophysical Journal</u> 306 (1985): 122.
- Olszewski, E. W.; Peterson, R. C.; and Aaronson, M. "High-Precision Radial Velocities of Faint Giants: Radial Velocities of Extreme Halo Systems and the Mass of the Galaxy." Astrophysical Journal (Letters) 302 (1986): L45.
- Orth, F. B.; Ginter, M. L.; Yoshino, K.; and Brown, C. M. "Vacuum UV Performance of a New 6.65-m Concave Diffraction Grating with 4800 Grooves/mm." Applied Optics 25 (1986): 2218.
- Ouellette, D. B.; Barlow, D. J.; Ulich, B. L.; and Latham, D. W. "A 26-Bit Absolute Encoder System." In <u>Advanced Technology Optical Telescopes III</u>, ed. L. D. Barr, SPIE vol. 628, p. 1. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986.
- Owocki, S. P., and Rybicki, G. B. "Instabilities in Line-Driven Stellar Winds: II. Effect of Scattering." Astrophysical Journal 299 (1985): 265.
- Palumbo, G. G. C.; Fabbiano, G.; Fransson, C.; and Trinchieri, G. "An X-Ray Study of M51 (NGC 5194) and Its Companion (NGC 5195)." <u>Astrophysical Journal</u> 298 (1985): 259; also in <u>Space Science Reviews</u> 40 (1985): 643.
- Peterson, R. C. "Radial Velocities of Remote Globular Clusters: Stalking the Missing Mass." Astrophysical Journal 297 (1985): 309.
- Peterson, R. C., and Foltz, C. B. "High-Precision Radial Velocities for Faint Giants. II. Calibration of the MMT Echellette." <u>Astrophysical Journal</u> 307 (1986): 143.
- Peterson, R. C., and Latham, D. W. "Stellar Velocity Dispersions for Four Low-Concentration Globular Clusters." <u>Astrophysical Journal</u> 305 (1986): 645.
- Peterson, R. C.; Olszewski, E. W.; and Aaronson, M. "High-Precision Radial Velocities for Faint Giants. I. MMT Echelle Results for Globular Cluster Stars."

 <u>Astrophysical Journal</u> 307 (1986): 139.
- Petro, L. D.; Foukal, P. V.; and Kurucz, R. L. "Photospheric Limb-Darkening

- Signatures of Global Structure Variations." Solar Physics 98 (1985): 23.
- Pineau des Forets, G.; Flower, D. R.; Hartquist, T. W.; and Dalgarno, A. "Theoretical Studies of Interstellar Molecular Shocks III. The Formation of CH+ in Diffuse Clouds." Monthly Notices of the Royal Astronomical Society 220 (1986): 801.
- Postman, M.; Geller, M. J.; and Huchra, J. P. "The Cluster-Cluster Correlation Function." <u>Astronomical Journal</u> 91 (1986): 1267.
- Reasenberg, R. D. "Microarcsecond Astrometric Interferometry." In <u>Astrometric Techniques</u>, eds. H. K. Eichhorn and R. J. Leacock, p. 321. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- ed. G. M. Sanger, SPIE vol. 571, p. 245. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986.
- Reasenberg, R. D., and Shapiro, I. I. "Prospects for Observations of Relativistic Effects on the Solar System." In <u>Proceedings of IAU Symposium 114</u>, Relativity in Celestial Mechanics and Astrometry, eds. J. Kovalevsky and V. A. Brumberg, p. 383. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Reid, M. J. "Antenna Earth: Astronomy with an Intercontinental Array of Radio Telescopes." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 104. New York: Charles Scribner's Sons, 1985.
- Remillard, R. A.; Bradt, H. V.; Buckley, D. A. H.; Roberts, W.; Schwartz, D.; Tuohy, I. R.; and Wood, K. "The Discovery of Eight Bright Active Galactic Nuclei Observed with the HEAO-1 Scanning Modulation Collimator." <u>Astrophysical Journal</u> 301 (1986): 742.
- Remillard, R. A.; Bradt, H. V.; McClintock, J. E.; Patterson, J.; Roberts, W.; Schwartz, D.A.; and Tapia, S. "H0538+608: A Bright AM Herculis-Type X-Ray Source." Astrophysical Journal (Letters) 302 (1986): L11.
- Roemer, E.; Marsden, B. G.; Kresak, L.; Kozai, Y.; and Taylor, G. E. "International Astronomical Union Commission 20." <u>Transcript of International Astronomical Union XIXA</u> (1985): 207.
- Ryan, J. W.; Clark, T. A.; Coates, R. J.; Ma, C.; Wildes, W. T.; Gwinn, C. R.; Herring, T. A.; Shapiro, I. I.; Corey, B. E.; Counselman, C. C.; Hinteregger, H. F.; Rogers, A. E. E.; Whitney, A. R.; Knight, C. A.; Vandenberg, N. R.; Pigg, J. C.; Schupler, B. R.; and Rönnäng, B. O. "Geodesy by Radio Interferometry: Determinations of Baseline-Vector, Earth-Rotation, and Solid-Earth-Tide Parameters with the Mark I VLBI System." Journal of Geophysical Research 91 (1986): 1935.
- Schild, R. "Optical Brightness Monitoring of the Twin QSO Q0957+561 A,B." In Quasars, eds. G. Swarup and V. K. Kapahi, p. 549. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Schmelz, J. T.; Feigelson, E. D.; and Schwartz, D. A. "A VLA Survey of Unidentified HEAO-1 X-Ray Sources." <u>Astronomical Journal</u> 92(3) (1986): 585.
- Schmidt, W. K. H.; Keller, H. U.; Wilhelm, K.; Arpigny, C.; Barbieri, C.; Biermann, L.; Bonnet, R. M.; Cazes, S.; Cosmovici, C. B.; Delamere, W. A.; Huebner, W. F.; Hughes, D. W.; Jamar, C.; Malaise, D.; Reitsema, H.; Seige, P.; and Whipple, F. L. "The Giotto Halley Multicolor Camera." In <u>The Giotto Mission Its Scientific Investigations, ESA SP-1077</u>, eds. R. Reinhard and B. Battrick, p. 149. Noordwijk, The Netherlands: European Space Agency, 1986.

- Schwartz, D. A.; McKinnon, P. J.; Murray, S. S.; Primini, F. A.; Van Speybroeck, L. P.; Zombeck, M. V.; Dailey, C. C.; Reily, J. C.; and Weisskopf, M. C. "X-Ray Testing of the AXAF Technology Mirror Assembly (TMA) Mirror." In X-Ray Instrumentation in Astronomy, ed. J. L. Culhane, SPIE vol. 597, p. 10. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986.
- Smith, B. W.; Raymond, J. C.; Mann, J.; and Cowan, R. D. "Atomic Processes in Fe XVII." Astrophysical Journal 298 (1985): 898.
- Stachnik, R. "Speckle Imaging: Astronomical Image Recovery by Innovative Techniques." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 41. New York: Charles Scribner's Sons, 1985.
- Stauffer, J. R., and Hartmann, L. "The Chromospheric Activity, Kinematics, and Metallicities of Nearby M Dwarfs." <u>Astrophysical Journal Supplement</u> 61(3) (1986): 531.
- ——. "Rotational Velocities of Low Mass Stars in Young Open Clusters." In <u>Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds.</u> D. M. Gibson and M. Zeilik, p. 30. New York: Springer-Verlag, 1986.
- Stern, R. A.; Antiochos, S. K.; and F. R. Harnden Jr. "Modeling of Coronal X-Ray Emission from Active Cool Stars: I. Hyades Cluster." <u>Astrophysical Journal</u> 305 (1986): 417.
- Stocke, J. T.; Liebert, J.; Schmidt, G. D.; Gioia, I. M.; Maccacaro, T.; Schild, R. E.; Maccagni, D.; and Arp, H. A. "The Optical Radio Properties of X-Ray Selected BL Lac Objects." <u>Astrophysical Journal</u>, 298 (1985): 619.
- Stolper, E., and Paque, J. M. "Crystallization Sequences of Ca-Al-Rich Inclusions from Allende: The Effects of Cooling Rate and Maximum Temperature." Geochimica et Cosmochimica Acta 50(8) (1986): 1785.
- Tananbaum, H.; Avni, Y.; Green, R. F.; Schmidt, M.; and Zamorani, G. "X-Ray Observations of the Bright Quasar Survey." <u>Astrophysical Journal</u> 305 (1986): 57.
- Thompson, A. R.; Moran, J. M.; and Swenson, G. W. <u>Interferometry and Synthesis in Radio Astronomy.</u> New York: Wiley-Interscience, 1986.
- Torrelles, J. M.; Ho, P. T. P.; Moran, J. M.; Rodríguez, L. F.; and Cantó, J. "Ammonia Observations of Regions with Molecular Outflows." <u>Astrophysical Journal</u> 307 (1986): 787.
- Traub, W. A. "Slicing the Sky: Sharper Images with an Orbiting Array of Optical Telescopes." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 67. New York: Charles Scribner's Sons, 1985.
- Tucker, W. A., and Schwartz, D. A. "The X-Ray Background and the Evolution of Quasars." <u>Astrophysical Journal</u> 308 (1986): 53.
- Tuohy, I. R.; Buckley, D. A.; Remillard, R. A.; Bradt, H. V.; and Schwartz, D. A.; "Optical Observations of New X-Ray Emitting Cataclysmic Variables." In <u>Proceedings of Bamberg Cataclysmic Variable Workshop</u>, (ESA SP-236), p. 73. Paris: European Space Agency, 1985.
- Turner, J. L., and Ho, P. T. P. "The One Parsec Core and Possible Nuclear Ejection in the NGC 253." Astrophysical Journal (Letters) 299 (1986): L179.

- Van Ballegooijen, A. A. "Electric Currents in the Solar Corona and the Existence of Magnetostatic Equilibrium." <u>Astrophysical Journal</u> 298 (1985): 421.
- . "On the Surface Response of Solar Giant Cells." <u>Astrophysical Journal</u> 304 (1986): 828.
- Van Speybroeck, L. V.; McKinnon, P. J.; Murray, S. S.; Primini, F. A.; Schwartz, D. A.; Zombeck, M. V.; Dailey, C. C.; Reily, J. C.; Weisskopf, M. C.; Wyman, C. L.; Glenn, P.; and Slomba, A. "Correspondence between AXAF TMA X-ray Performance and Models Based Upon Mechanical and Visible Light Measurements."
 In X-Ray Instrumentation in Astronomy, ed. J. L. Culhane, SPIE vol. 597, p. 20. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1985.
- Vessot, R. F. C.; Mattison, E. M.; Klepczynski, W. J.; Silvera, I. F.; Godfried, H. P.; and Walsworth, R. L. "Results of Two Years of Hydrogen Maser Clock Operation at the U.S. Naval Observatory." In <u>Proceedings of the 17th Annual Precise Time and Time Interval Meeting</u>, p. 413. Washington, D.C.: United States Naval Observatory, 1985.
- Vessot, R. F. C.; Mattison, E. M.; Walsworth, R. L.; Silvera, I. F.; Godfried, H. P.; and Agosta, C. C. "A Hydrogen Maser at Temperatures below 1K." In <u>Proceedings of the 40th Annual Symposium on Frequency Control</u>, p. 413. Philadelphia: Institute of Electrical and Electronics Engineers, 1986.
- Vrtilek, S. D.; Helfand, D. J.; Halpern, J. P.; Kahn, S. M.; and Seward, F. D. "X-Ray Emission Lines from Three Galactic Bulge Sources." <u>Astrophysical Journal</u> 308 (1986): 644.
- Vrtilek, S. D.; Kahn, S. M.; Grindlay, J. E.; Helfand, D. J.; and Seward, F. D. "Spectral Variability of Cygnus X-2: Structure in the Circumsource Material." <u>Astrophysical Journal</u> 307 (1986): 698.
- Walsworth, R. L.; Silvera, I. F.; Godfried, H. P.; Agosta, C. C.; Vessot, R. F. C.; and Mattison, E. M. "A Hydrogen Maser at Temperatures below 1K." Physical Review A (Rapid Communication) 34(3) (1986): 2550.
- Walter, F. M., and Myers, P. C. "Naked T Tauri Stars and Post T Tauri Stars." In Proceedings of the Fourth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, eds. D. M. Gibson and M. Zeilik, p. 50. New York: Springer-Verlag, 1986.
- Weekes, T. C. "The Gamma-Ray Universe: Taking a Long, Hard Look." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 231. New York: Charles Scribner's Sons, 1985.
- ——. "Very High Energy Gamma-Ray Sources." <u>The Physics Teacher</u> 24 (1986): 20.
- Welther, B. L. "Shapley's Standard Candles." <u>Journal of the American Association of Variable Star Observers</u> 14(2) (1985): 77.
- ——. "Shapley in Washington: A Scientist Among Politicians." <u>Journal of the American Association of Variable Star Observers</u> 14(2) (1985): 76.
- Wheeler, J. C., and Levreault, R. "The Peculiar Type I Supernova in NGC 991."

 <u>Astrophysical Journal (Letters)</u> 294 (1985): L17.
- Whipple, F. L. <u>The Mystery of Comets</u>, 276 pp. Washington, D.C.: Smithsonian Press, 1985.

- ———. "Scientific Presentations and Publications, Des Gegenwarteige Stand des Eiskonglomeratmodells der Kometenkerne." <u>Die Sterne 61</u> 5/6 (1985): 303.
- ——. "Flying Sandbanks Versus Dirty Snowballs: Discovering the Nature of Comets." Mercury XV (1986): 1.
- Whitney, C. Whitney's Star Finder, 4th Edition. New York: Alfred Knopf, 1985.
- Wilkes, B. "Studies of Broad Emission Lines in QSOs II: Properties of a Large, Predominantly Radio Selected Sample." Monthly Notices of the Royal Astronomical Society 218 (1986): 331.
- Wilkes, B., and Elvis, M. "The Diverse Soft X-Ray Slopes of QSO's." In <u>Continuum Emission in Active Galactic Nuclei</u>, ed. M. Sitko, p. 56. Tucson, Arizona: Kitt Peak National Observatory, 1986.
- Willner, S. P. "The Cool Sky: Infrared Astronomy." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 152. New York: Charles Scribner's Sons, 1985.
- Willner, S. P.; Elvis, M.; Fabbiano, G.; Lawrence, A.; and Ward, M. J. "Infrared Observations of Linear Galactic Nuclei." <u>Astrophysical Journal</u> 299 (1985): 443.
- Withbroe, G. L. "EUV Observations of Subflares and Surges." Solar Physics 99 (1985): 145.
- ——. "Probing the Sun's Secrets: An Advanced Solar Observatory." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 181. New York: Charles Scribner's Sons, 1985.
- ——. "Corona and Solar Wind." In <u>Solar Flares and Coronal Physics Using P/OF as a Research Tool, NASA Conference Publication No. 2421</u>, eds. E. Tandberg-Hanssen, R. M. Wilson, and H. S. Hudson, p. 221. Washington, D.C.: National Aeronautics and Space Administration, 1986.
- ——. "Origins of the Solar Wind in the Corona." In <u>The Sun and the Heliosphere in Three Dimensions</u>, ed. R. G. Marsden, p. 19. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Withbroe, G. L.; Habbal, S. R.; and Ronan, R. S. "Impulsive Phenomena in a Small Active Region." Solar Physics 95 (1985): 297.
- Withbroe, G. L.; Kohl, J. L.; and Weiser, H. "Analysis of Coronal H I Lyman-Alpha Measurements in a Polar Region of the Sun Observed in 1979." <u>Astrophysical Journal</u> 307 (1986): 381.
- Withbroe, G. L.; Kohl, J. L.; Weiser, H.; and Munro, R. H. "Coronal Temperatures, Heating and Energy Flow in a Polar Region of the Sun at Solar Maximum." Astrophysical Journal 297 (1985): 324.
- Wood, J. A. "An Overview of the Cosmic History of the Biogenic Elements and Compounds." In Cosmic History of the Biogenic Elements and Compounds. NASA SP-476, eds. J. A. Wood and S. Chang, p. 4. Washington, D.C.: National Aeronautics and Space Administration, 1985.
- ———. "Meteoritic Constraints on Processes in the Solar Nebula." In <u>Protostars and Planets II</u>, ed. D. C. Blak, p. 687. Tucson, Arizona: University of Arizona Press, 1985.
- -----. "The Initiation of Chondrule Accretion after Chondrule Formation by Drag

- Heating." In <u>Lunar and Planetary Science XVI</u>, p. 920. Houston, Texas: Lunar and Planetary Institute, 1985.
- ———. "Moon Over Mauna Loa." In <u>Origin of the Moon</u>, eds. W. K. Hartmann, R. J. Phillips, and G. J. Taylor, p. 17. Houston, Texas: Lunar and Planetary Institute, 1986.
- ——. "High Temperatures and Chondrule Formation in a Turbulent Shear Zone Beneath the Nebula Surface." In <u>Lunar and Planetary Science</u>, p. 956. Houston, Texas: Lunar and Planetary Institute, 1986.
- Wood, J. A., and Chang, S. (editors) <u>Cosmic History of the Biogenic Elements and Compounds, NASA Special Publication 476</u>, 80 pp. Washington, D.C.: National Aeronautics and Space Administration, 1985.
- Wood, J. A.; Calyton, R. N.; Brownlee, D. E.; Kerridge, J. F.; Hanner, M. S.; Walker, R. M.; Buseck, P.; A'Hearn, M. F.; Grun, E.; Rietmeijer, F.; Arrhenius, G.; Zinner, E.; Frisch, P.; and Clayton, D. D. "Interstellar Material in the Solar System." In <u>Interrelationships Among Circumstellar, Interstellar, and Interplanetary Dust, NASA Conference Publication No. 2403</u>, eds. J. A. Nuth, and R. E. Stencel, p. WG-33. Washington, D.C.: National Aeronautics and Space Administration, 1986.
- Woodard, M., and Noyes, R. W. "Change of Solar Oscillation Frequencies with the Solar Cycle." Nature 318(6045) (1985): 449.
- Woodward, C. E.; Pipher, J. L.; Helfer, H. L.; Sharpless, S.; Moneti, A.; Kozikowski, D.; Oliveri, M.; Willner, S. P.; Lacasse, M. G.; and Herter, T. "Optical, Radio, and Infrared Observations of Compact H II Regions. V. The Hourglass in M 8." <u>Astronomical Journal</u> 91 (1986): 870.
- Worrall, D. M. "BL Lac Objects and Relativistic Beaming." In <u>Continuum Emission in Active Galactic Nuclei</u>, ed. M. L. Sitko, p. 97. Tucson, Arizona: Kitt Peak National Observatory, 1986.
- Worrall, D. M.; Giommi, P.; Tananbaum, H.; and Zamorani, G. "A Statistical Study of the Relationship between X-Ray, Optical and Radio Luminosity for a Sample of QSOs." In Quasars, eds. G. Swarup and V. K. Kapahi, p. 263. Dordrecht, Holland: D. Reidel Publishing Company, 1986.
- Worrall, D. M.; Rodriguez-Espinosa, J. M.; Wisniewski, W. Z.; Miller, H. R.; Bruhweiler, F. C.; Aller, M. F.; and Aller, H. D. "Observations of 3 BL Lacertae Objects: Constraints on Inhomogeneous Relativistically-Beamed Jet Models." <u>Astrophysical Journal</u> 303 (1986): 589.
- Wyman, C. L.; Dailey, C. C.; Reily, C.; Weisskopf, M.; McKinnon, P.; Schwartz, D.;
 Van Speybroeck, L.; and Zombeck, M. "The AXAF Technology Mirror Assembly Program: An Overview." In X-Ray Instrumentation in Astronomy, ed. J. L. Culhane, SPIE vol. 597, p. 2. Bellingham, Washington: Proceedings of SPIE The International Society for Optical Engineering, 1986.
- Yee, J.-H.; Abreu, V. J.; and Dalgarno, A. "The Atmosphere Explorer Optical Glow Near Perigee Altitudes." Geophysical Research Letters 12 (1985): 651.
- Zombeck, M. V. "AXAF: A Permanent Observatory in Space." In <u>Infinite Vistas: New Tools for Astronomy</u>, eds. J. Cornell and J. Carr, p. 211. New York: Charles Scribner's Sons, 1985.
- Zygelman, B., and Dalgarno, A. "Direct Charge Transfer of He+ in Neon." <u>Physical Review A</u> 33 (1986): 3853.

- Chereskin, B. M. and Gantt, E. "Enchancement of Oxygen-evolution in Photosystem II-phycobilisome Particles from Porphyrium cruentum." In Plant and Cell Physiol. 27 (1986): 751-754.
- Deitzer, D. F. "Photoperiodic Processes: Induction, Translocation and Initiation." In The Manipulation of Flowering (1986): 241-253. Edited by J. G. Atherton. Butterworth Press.
- Drake, B. G., Rogers, H. H., and Allen, L. H., Jr. "Methods of Exposing Plants to Elevated Carbon Dioxide." In Direct Effects of Increasing Carbon Dioxide on Vegetation (1985): 11-31. Edited by B. R. Strain and J. D. Cure. United States Department of Energy.
- Frackowiak, D., Gantt, E., Hotachandani, S., Lipschultz, C. A., and Leblanc, R. M. "Polarized Photoacoustic Spectra of Phycobilisomes in Polyvinyl Alcohol Films." In Photochem. Photobiol. 43 (1986): 335-337.
- Gantt, E. "Phycobilisomes." In Encyclopedia of Plant Physiology New Series, Photosynthesis III (1986): 260-268. Edited by L. A. Staehelin and C. J. Arntzen. Springer-Verlag.
- , E., Lipschultz, C. A., and Redlinger, T. "Phycobilisomes: A Terminal Acceptor Pigment in Cyanobacteria and Red Algae." In Molecular Biology of the Photosynthetic Apparatus (1985): 223-229. Edited by K. Steinbeck, Cold Spring Harbor.
- Goldberg, B. "The Solar Ultraviolet, a Brief Review." In Advances in Solar Energy 3 (1986): 357-386. Edited by K. W. Boer.
- Hattori, T., and Margulies, M. M. "Synthesis of Large Subunit of Ribulosebisphosphate Carboxylase by Thylakoid-bound Polyribosomes from Spinach Chloroplasts." In Arch. Biochem. Biophys. 244 (1986): 630-640.
- Hines, A. H. "Larval Patterns in the Life Histories of Brachyuran Crabs (Crustacea, Decopoda, Brachyura)." Bulletin of Marine Science 39 (1986): 223-246.
- , A. H. "Larval Problems and Perspectives in the Life Histories of
- Marine Invertebrates." In <u>Bulletin of Marine Science 39</u> (1986): 275-294.

 A. H., Haddon, P. J., Miklas, J. J., Wiechert, L. A., and Haddon, A.

 M. "Estuarine Invertebrates and Fish: Sampling Design and Constraints for Long-term Measurements of Population Dynamics." In New Approaches to Monitoring Aquatic Ecosystems (1986): 140-164. Edited by T. P. Boyle. American Society for Testing Materials.
- Jordan, T. E., Correll, D. L., Peterjohn, W. T., and Weller, D. E. "Nutrient flux in a landscape: The Rhode River Watershed and Receiving Waters." In Watershed Research Perspectives (1986): 57-76. Edited by D. L. Correll. Smithsonian Press.
- , T. E., and Correll, D. L. "Nutrient Chemistry and Hydrology of Interstitial Water in Brackish Tidal Marshes of Chesapeake Bay." arine Coastal and Shelf Science 21(1985): 45-55.
- Khanna, R., Graham, J.-R., Myers, J., and Gantt, E. "Variation in the Polypeptide Composition of Phycobilisomes from Anacystis midulans and Three Pigment Mutants." In Photosynth. Res. 88 (1986): 149-159.
 Lipcius, R. N., and Hines, A. H. "Variable Functional Responses of a Marine
- Predator in Dissimilar Homogeneous Microhabitats." Ecology 67 (1986): 1361-1372.
- Lynch, J. F., Morton, E. S., and Van Der Voort, M. E. "Habitat Segretation Between the Sexes of Wintering Hooded Warblers (Wilsonia citrina)." The Auk 102 (1985): 714-721.

- Margulies, M. M. "Compartmentation of Protein Synthesis Within the Chloroplast." In Regulation of Chloroplast Differentiation (1986): 171-180. Edited by G. Akoyunoglou and H. Senger. Alan R. Liss Publishers.
- , M. M., Tiffany, H. L., and Hattori, T. "Biosynthesis of the Chlorophyll-a P700 Polypeptide(s)." In Regulation of Chloroplast Differentiation (1986): 181-186. Edited by G. Akoyunoglou and H. Senger. Alan R. Liss Publishers.
- Ohki, K., Gantt, E., Lipschultz, C. A., and Ernst, M. J. "Constant Phycobilisome Size in Chromatically Adapted Cells of the Cyanobacterium Tolypo-thrix tenuis, and Variation in Nostoc sp." In Plant Physiol. 79 (1985): 943-948.
- Peterjohn, W. T., and Correll, D. L. "The Effect of Riparian Forest on the Volume and Chemical Composition of Baseflow in an Agricultural Watershed." In Watershed Research Perspectives (1986): 244-262. Edited by D. L. Correll. Smithsonian Press.
- Sager, J. C. "Spectral Effects on the Growth of Lettuce Under Controlled Environment Conditions." Acta Horticultural 148 (1984): 889-896.
- Weiner, J. "How Competition for Light and Nutrients Affects Size Variability
- in <u>Ipomea tricolor</u> Populations." <u>Ecology</u> 67 (1986): 1425-1427. Weller, D. E., Peterjohn, W. T, Goff, N. M., and Correll, D. L. "Ion and Acid Budgets for a Forested Atlantic Coastal Plain Watershed and Their Implications for the Impacts of Acid Deposition." In Watershed Research Perspectives (1986): 392-421. Edited by D. L. Correll. Smithsonian Press.
- Whigham, D. F. "Wetlands Their Natural Features, Uses and Responses to Management." In Tomorrow's Oasis Today (1986): 35-40. Edited by E. C. Masteller and C. Baxter. Erie County Planning. , D. F., Chitterling, C., Palmer, B., and O'Neill, J. "Modification of Runoff From Upland Watersheds - the Influence of a Diverse Riparian Ecosystem." In Watershed Research Perspectives (1986): 305-332. Edited by D. L. Correll. Smithsonian Press.

Smithsonian Environmental Research Center [Additional Bibliography]

- Chereskin, B. M.; Clement-Metral, J. D.; Gantt, E. "Characterization of a purified photosystem II-phycobilisome particle preparation from
- Porphyridium cruentum." Plant Physiol. 77(1985): 626-629.
 Chereskin, B. M.; Gantt, E. "Enhancement of oxygen-evolution in photosystem II-phycobilisome particles from Porphyrium cruentum." Plant and Cell Physiol. 27(1986): 751-754.
- Cleland, C. F. "Biochemistry of induction The immediate action of light." In: Light and The Flowering Process, pp. 123-136, Academic Press, 1984.
- Cleland, C. F. "Chemical control of flowering in the long-day plant Lemna
- gibba G3." Biol. Plant. 27(1985): 392-397.
 Cleland, C. F.; Tanaka, O. "Inhibition of flowering in the long-day plant Lemna gibba G3 by Hutner's medium and its reversal by medium modification." Plant Cell Physiol. In press.
- Clement-Metral, J. D.; Gantt, E.; Redlinger, T. "A photosystem II-phycobilisome preparation from the red alga, Porphyridium cruentum: Oxygen evolution, ultrastructure, and polypeptide resolution." Arch. Biochem. Biophys. 238(1985): 10-17.
- Cotter, J. F. P.; Evenson, E. B.; Sirkin, L.; Stuckenrath, R. Comments on "Corry Bog, Pennsylvania: A case study of the radiocarbon dating of Marl." Letter to the Editor. Quaternary Res. 24(1985): 244-243.

- Cotter, J. F. P.; Evenson, E. B.; Sirkin, L.; Stuckenrath, R. "The interpretation of 'bog-bottom' radiocarbon dates in glacial chronologies." In: Correlation of Quaternary Chronologies, Edited by W. C. Mahaney, pp. 299-316, Teo Books, 1984.
- Drake, B. G.; Rogers, H. H.; Allen, L. H., Jr. I. Direct Effects of Increasing Carbon Dioxide on Vegetation. Department of Energy. Office of Energy Research Report 0238. Chapter 2, pp 11-31, December 1985.
- Frackowiak, D.; Gantt, E.; Hotachandani, S.; Lipschultz, C. A.; Leblanc, R. M. "Polarized photoacoustic spectra of phycobilisomes in polyvinyl alcohol films." Photochem. Photobiol. 43(1986): 335-337.
- Fujioka, S.; Yamaguchi, I.; Murofushi, N.; Takahashi, N.; Kaihara, S.; Takimoto, A.; Cleland, C. F. "The influence of nicotinic acid and plant hormones on flowering in <u>Lemna...</u>" <u>Plant Cell Physiol.</u> 27(1986): 109-116.
- Fujioka, S.; Yamaguchi, I.; Murofushi, N.; Takahashi, N.; Kaihara, S.; Takimoto, A.; Cleland, C. F. "Isolation and identification of nicotinic acid as a flower-inducing factor in Lemna." Plant Cell Physiol. 27(1986): 103-108.
- Fujioka, S.; Yamaguchi, I.; Murofushi, N.; Takahashi, N.; Kaihara, S.; Takimoto, A.; Cleland, C. F. "The role of benzoic acid and plant hormones in flowering of Lemna gibba G3." Plant Cell Physiol. 26(1985): 655-659.
- Gantt, E. "Phycobilisomes." In Encyclopedia of Plant Physiology New Series, Vol. 19, Photosynthesis III, Edited by L. A. Staehelin and C. J. Arntzen. pp. 260-268, Springer-Verlag, Berlin, 1986.
- Gantt, E.; Lipschultz, C. A.; Redlinger, T. Phycobilisomes: A Terminal Acceptor Pigment in Cyanobacteria and Red Algae. In: Molecular Biology of the Photosynthetic Apparatus, Edited by K. Steinback et al., pp. 223-229, Cold Spring Harbor Laboratory, 1985.
- Goldberg, B. The Solar Ultraviolet, A Brief Review. Advances in Solar Energy, Vol. 3, Edited by K. W. Boer, Plenum Publishing Corp., 1986.
- Goldberg, B.; Klein, W. H.; Correll, D. L.; Pierce, J. W. "Instrumentation for performing spectral measurements in a marine environment." Mar. Tech. Soc. J. 18(1985): 6 pps.
- Guilday, J. E.; Cotter, J. F. P.; Cundall, D.; Evenson, E. B.; Gatewood, J. B.; Morgan, A. V.; Morgan, A.; McCrady, A. D.; Peteet, D. M.; Stuckenrath, R.; Vanderwal, K. Paleoecology of an early Pleistocene (Irvingtonian) cenote: Preliminary report on the Hanover Quarry No. 1 Fissure, Adams County, Pennsylvania. In: Correlation of Quaternary Chronologies, Edited by W. C. Mahaney, pp. 119-132, Geo Books, Norwich, England, 1984.
- Hattori, T.; Margulies, M. M. "Synthesis of large subunit of ribulosebisphosphate carboxylase by thylakoid-bound polyribosomes from spinach chloroplasts." Arch. Biochem. Biophys. 244(1986): 630-640.
- Holmes, M. G.; Klein, W. H. "Evidence for phytochrome involvement in light-mediated stomatal movement in Phaseolus vulgaris L." Planta 166(1986): 348-353.
- Holmes, M. G.; Klein, W. H.; Sager, J. C. "Photons, flux and some light on philology." HortScience 20(1985): 29-31.1
- Khanna, R.; Graham, J.; Myers, J.; Gantt, E. "Variation in the polypeptide composition of phycobilisomes from Anacystis midulans and three pigment mutants." Photosynthesis Research 8(1986): 149-159.
- Krones, M. J.; Sager, J. C.; Johnson, A. T. A plant growth irradiance control system. American Soc. Agr. Engineers, Paper No. 85-4529, for presentation at Winter Meeting, Am. Soc. Agr. Engineers, Chicago, Ill., Dec. 17-20, 1985.
- LeRoith, D.; Pickens, W.; Wilson, G. L.; Miller, B.; Berelowitz, M.; Vinik, A. I.; Collier, E.; Cleland, C. F. "Somatostatin-like material is present in flowering plants." Endocrinology 117(1985): 2093-2097.
- Longworth, J. W.; Jagger, J.; Shropshire, Jr., W. (eds.) "Photobiology 1984". pp. 1-283, Praeger Scientific Publishers, New York, 1985.

- Margulies, M. M. Compartmentation of protein synthesis within the chloroplast. Regulation of Chloroplast Differentiation, Alan R. Liss, Edited by G. Akoyunoglou and H. Senger, pp. 171-180, New York, 1986.
- Margulies, M. M.; Tiffany, H. L.; Hattori, T. Biosynthesis of the chlorophyll-a P700 polypeptide(s). Regulation of Chloroplast Differentiation, Alan R. Liss, Edited by G. Akoyunoglou and H. Senger, pp. 181-186, New York, 1986.
- Onki, K.; Gantt, E.; Lipschultz, C. A.; Ernst, M. J. "Constant phycobilisome size in chromatically adapted cells of the cyanobacterium Tolypothrix tenuis, and variation in Nostoc sp." Plant Physiol. 79(1985): 943-948.
- Photosynthesis and Photorespiration in salt marsh species. Commissioned Review, B. G. Drake. In press, Plant, Cell, and Environment. Sept. 1986.
- Roth, J.; LeRoith, D.; Collier, E. S.; Weaver, N. R.; Watkinson, A.; Cleland, C. F.; Glick, S. M. "Evolutionary origins of neuropeptides, hormones, and receptors: possible applications to immunology." J. Immunol. 135(1985): 816-819.
- Sager, J. C.; Smith, W. O.; Edwards, J. L.; Cyr, K. L. Use of spectral data to determine photosynthetic efficiency and phytochrome photoequilibria. American Society of Agricultural Engineers Meeting, San Luis Obispo, California, (1986).
- Shropshire, W., Jr. "Signal processing in the transduction mechanisms of phototropism." In: Sensory Perception and Transduction in Aneural Organisms, Edited by G. Colombetti and Pill-Soon Song, pp. 211-229, Plenum Publishing Corp., 1985.
- Thompson, L. K.; Ziv, M.; Deitzer, G. F. "Photocontrol of peanut (Arachis hypogaea L.) embryo and ovule development in vitro." Plant Physiol. 78(1985): 370-373.
- Vodkin, L. O.; Rhodes, P. R.; Chandlee, J. M.; Harding, R. W. Lectin genes and a transposable element in soybean. In <u>Biotechnology for Solving Agricultural Problems: Beltsville Symposium in Agricultural Research</u>, Vol. 10. In press.
- Vogel, H.; Sager, J. C. "Photosynthetic response of <u>Prorocentrum</u> mariae-lebouriae (Dinophyceae) to different spectral qualities, irradiances, and temperatures." Hydrobiologia 128(1985): 143-153.
- Zeiger, Eduardo; Grivet, C.; Assmann, S. M.; Deitzer, G. F.; and Hannegan, M. W. "Stomatal limitation to carbon gain in Paphiopedilum sp. (Orchidaceae) and its reversal by blue light." Plant Physiol. 77(1985): 456-460.

SMITHSONIAN INSTITUTION ARCHIVES

- Cox, William E. "Guide to the Field Reports of the U. S. Fish and Wildlife Service, c. 1860-1961." Guides to Collections in the Smithsonian Archives, no. 4. Archives and Special Collections of the Smithsonian Institution. Washington, D.C.: Smithsonian Archives, 1986.
- Moss, William W. and Mazikana, Peter C. "Archives, Oral History and Oral Tradition: a RAMP Study." General Information Programme and UNISIST, Records and Archives Management Programme. Paris: United Nations Educational, Scientific and Cultural Organization, 1986.
- Vogt-O'Connor, Diane L. "Smithsonian Institution Archives Photo Survey Project Sample Collection Report," In Management of Photographic Collections in Historical Agencies and Museums:

 American Association for State and Local History Technical Report

 5, pp. 8-9. Edward Pershey (Nashville: AASIH, 1986).

- Bedini, Silvio A. "Citadels of Learning: The Museo Kircheriano and Other Italian Seventeenth-Century Science Collections." In Enciclopedismo in Roma Barocca. Edited by Maristella Casciato, Maria Grazia Ianiello, and Maria Vitale. Venice: Marsilio Editore, 1986.
- . "That Awfull Stage (The Search for the State House Yard Observatory)." In Science and Society in Early America. Essays in Honor of Whitfield J. Bell, Jr. Edited by Randolph S. Klein. Philadelphia: American Philosophical Society, 1986.
- . "Galileo and Scientific Instrumentation." In Reinterpreting Galileo. Edited by William A. Wallace. Studies in Philosophy and the History of Philosophy, no. 15. Washington, D.C.: The Catholic University of America Press, 1986.
- . "The Galilean Jovilabe." Storia della Scienza 13 (1986).
 . "Dondi, Giovanni de'." In Mittelalters Lexikon. Munich:
 Artemis Verlag, 1986.
 - . "Dondi, Jacopo de'." In <u>Mittelalters Lexikon</u>. Munich: Artemis Verlag, 1986.
 - . "Theft of Instruments in Rome: An Update." Bulletin of the Scientific Instrument Society 9 (1986):5-8.
 - . [Review] Nineteenth-Century Scientific Instruments by L'E. Turner in Technology and Culture 27 (1986):146-48.
 - . [Review] Introduzione all'arithmetica mercantile del Medioevo e del Rinascimento by Raffaella Franci and Laura Toti Rigatelli in Historia Mathematica (1986):293-95.
- . [Review] L'Eredita scientifica di Leopoldo Nobili: Bibatto teorico e ruolo degli strumenti nella fisica del prima Ottocento by Giambattista Cadoppi et al. in Bulletin of the Scientific Instrument Society 8 (1986):14.
- . [Review] La Collezione degli Antichi Apparecchi dell'Istituto de Fisica: Gli Strumenti Ottici (1840-1890) and Meccanica dei Fluidi e Termologia (1840-1900) by Ezio Ragozzino and Edvige Schettino in Bulletin of the Scientific Instrument Society 8 (1986):14-15.
- Child, Margaret S. "Funding Preservation Programs." In <u>Preserving America's Performing Arts</u>, Edited by B. Cohen-Stratyner and B. Kueppers. New York: The Theatre Library Association, 1985.
- Gwinn, Nancy E. "Cooperative Collection Development--National Trends and New Tools." Art Documentation 4 (1985):143-47.
- Gwinn, Nancy E. et al. Final Report of the Preservation Planning
 Program. Washington, D.C.: Office of Management Studies,
 Association of Research Libraries, 1986.
- Kenyon, Kay. <u>Suggested Guidelines for Zoo and Aquarium Libraries</u>.
 Washington, D.C.: Smithsonian Institution Libraries, 1986.
- Matthews, Nancy L. et al., assistant eds., with Marcus, M. and Perry, J., eds. The Documentary History of the Supreme Court of the United States, 1789-1800, vol. I, pts. 1 and 2. New York: Columbia University Press, 1985.
- Neff, William B. "Paris Exchange." MAHD Bulletin (Museums, Arts and Humanities Division, Special Libraries Association) 16 (1) (Autumn 1985).
- . "La bibliothéconomie en France: An Exchange Librarian's Report." College & Research Libraries News 47 (4) (April 1986).
- Pietropaoli, Frank A. "National Air and Space Museum Library." In Sci-Tech Libraries in Museums and Aquariums. Science and Technology Libraries Series, no. 6. New York: The Haworth Press, 1985; also in Science and Technology Libraries 6 (1985-86):53-63.

- Ratner, Rhoda S. "National Museum of American History Branch Library."

 In Sci-Tech Libraries in Museums and Aquariums. Science and
 Technology Libraries Series, no. 6. New York: The Haworth Press,
 1985; also in Science and Technology Libraries 6 (1985-86):65-73.
- Ratner, Rhoda S. et al. Physical Condition of the Collections:

 Report of a Survey. Washington, D.C.: Smithsonian Institution
 Libraries, 1986.
- Rey-Watson, Joyce. [editorial] P-A-M Bulletin 13 (1) (1985).
- Scott, Catherine D. "Report on the IFLA Conference (August 18-24, 1985, Chicago)." SLA Chapter Notes 45 (2) (1985):6-7.
- Schallert, Ruth F. and White, James J. "Illustrations in the Contributions from the U. S. National Herbarium 1890-1974." Huntia 6 (1986):147-164.
- Stanley, Janet L. "Africa." <u>Magazines for Libraries</u>. 5th edition. New York: Bowker, 1986.
- _____. "African Art and the Art and Architecture Thesaurus." Museum Studies Journal, 2 (Spring 1986):42-52.
- . [Review] Traditional Textiles of Tunisia and Related North

 African Weaving by Irmtraud Reswick in Art Documentation 5

 (1986):95-96.
- Wells, Ellen B. [Review] <u>Wie Finde Ich Literatur Zur Geschichte Der Naturwissenschaften Und Technik</u>, by Burghard Weiss in <u>Isis</u>, 76 (1985):597-598.
- . "Antiquarian Book Dealers Specializing in Bibles and Related Works Prepared by the Smithsonian Libraries." Bible Collectors' World 2.1 (1986):15.
- . "Classics of Equine Veterinary Medicine." Medical Heritage 2 (1986):299-301.
- . "Reprint." In Encyclopedia of Library and Information
 Science. Edited by Allen Kent. New York: Marcel Dekker, 1986.

ARCHIVES OF AMERICAN ART

- Brown, Robert F. "Regional Office Report New England." <u>Archives of American Art Journal</u>, 24(4); 25(1-3).
- Esko, Claudia. [Review] American Etchings of the Nineteenth Century, by Francine Tyler. Archives of American Art Journal, 25(1&2).
- Karlstrom, Paul T. "Regional Office Report West Coast." Archives of American Art Journal, 24(4); 25(1-3).
- Kendall, Sue Ann. "Archives of American Art, Smithsonian Institution." Art Documentation, 5(3).
- . "Regional Office Report Midwest." Archives of American Art Journal, 24(4); 25(1-3).
- Kirwin, Liza. "Back to Bohemia with the Charcoal Club of Baltimore."

 Archives of American Art Journal, 25(1&2).
- . "Regional Office Report Mid-Atlantic." Archives of American Art Journal, 24(4); 25(1-3).
- McCoy, Garnett, "Editorial Note." Archives of American Art Journal, 24(4); 25(1-3).
- McNaught, William. "Regional Office Report New York." Archives of American Art Journal, 24(4); 25(1-3).
- Paul, Stella. "Regional Office Report Southern California." Archives of American Art Journal, 24(4); 25(1-3).

CENTER FOR ASIAN ART: ARTHUR M. SACKLER GALLERY and FREER GALLERY OF ART

- Atil, Esin, W. T. Chase and Paul Jett (Exhibition Catalogue) Islamic Metalwork in the Freer Gallery of Art. Washington, D. C.: 1985.
- . (Exhibition Catalogue) The Age of Sultan Suleyman the Magnificent. New York: 1986.
- . "Mamluk Painting in the Late Fifteenth Century," Mugarnas 3 (1984): 159-171.
- . "Islamic Art in the Freer Gallery of Art," Arts and the Islamic World 3 (autumn 1985): 57-59.
- . Süleymanname: The Illustrated History of Süleyman. New York: 1986. Chase, W. Thomas, Esin Atil and Paul Jett (Exhibition Catalogue) Islamic
- Metalwork in the Freer Gallery of Art. Washington, D. C.: 1985.
- . "Compositions of Oriental Bronzes: Another Look," Application of Science in Examination of Works of Art: Proceedings of the Seminar September 7-9, 1983. Edited by Pamela and Lambertus van Zelst. Boston,
- Cort, Louise A. "Korean Influences in Japanese Ceramics: The Impact of the Teabowl Wars of 1592-1598," Ceramics and Civilization 2 (1985): 331-362.

 "Shigaraki Pottery," 1986 Festival of American Folklife. (1986):
- 26-31.
- "Looking at White Dew," Chanoyu Quarterly 43. (1985): 36-48.
- . Review of Lost Innocence by Brian Moeran, with H. Leedom Lefferts, Jr. The Journal of Japanese Studies 12 (no. 2) (1986): 387-395.
- Fu, Shen C. Y., Glenn D. Lowry and Ann Yonemura (Exhibition Catalogue) From Concept to Context: Approaches to Asian and Islamic Calligraphy. Washington, D. C.: 1985.
- Jett, Paul, Esin Atil and W. T. Chase (Exhibition Catalogue) Islamic Metalwork in the Freer Gallery of Art. Washington, D. C.: 1985.
- Lowry, Glenn D., Shen C. Y. Fu and Ann Yonemura (Exhibition Catalogue) From Concept to Context: Approaches to Asian and Islamic Calligraphy. Washington, D. C.: 1985.
- . Iskandar Mirza and Early Timurid Metalwork," Orientations (August) 1986): 12-22.
- Winter, John. "Gold in Japanese Paintings: A Case History Involving the kirikane technique," Application of Science in Examination of Works of Art, Proceedings of the Seminar September 7-9, 1983. Edited by Pamela A. England and Lambertus van Zelst. Boston: 1985: 46-54.
- . Review of Conservation of Paintings and Manuscripts of Southeast Asia by O. P. Agrawal, Studies in Conservation, London: 1986: 31:140-141.
- Yonemura, Ann, Shen C. Y. Fu and Glenn D. Lowry (Exhibition Catalogue) From Concept to Context: Approaches to Asian and Islamic Calligraphy. Washington, D. C.: 1985.

- Ballard, M.W., and N.S. Baer. "Ethylene Oxide Fumigation: Results and Risk Assessment." Restaurator, 12 (1986).
- Ballard, M.W., R.J. Koestler, and N. Indictor. "Weighted Silks Observed Using Energy Dispersive X-ray Spectrometry." Scanning Electron Microscopy, 2 (1986): 499-506.
- Ballard, M.W. "Textile Conservation at the Conservation Analytical Laboratory, Washington, D.C." <u>Textile Conservation Newsletter</u>, (Fall 1985): 27-28.
- Bishop, R.L., G. Harbottle, D.J. Reents, E.V. Sayre and L. van Zelst.
 "Compositional Attribution on Non-Provenienced Maya Polychrome
 Vessels." In <u>Application of Science in Examination of Works of Art</u>,
 eds. P.A. England and L. van Zelst, (1985), pp. 117-124. Museum of Fine
 Arts, Boston.
- Bishop R.L., E.V. Sayre and L. van Zelst. "Characterization of Mesoamerican Jade". In Application of Science in Examination of Works of Art, eds P.A. England and L. van Zelst, (1985), pp. 151-156. Museum of Fine Arts, Boston.
- Blackman, M.J. "The Provenience of Obsidian Artifacts from Late Chalcolithic Levels at Aphrodisias, Turkey." In <u>Prehistoric Aphrodisias</u>, ed. M. Joukowsky, (Archaeologia Transatlantica Vol. IV), Louvain-la-Neuve, Institut Superieur D'Archaeologie et Histoire de L'Art, (1986) Brown University.
- Boulton, Ann. "The Examination, Treatment and Analysis of a Pair of Boots from the Aleutian Islands Including a Note About Possible Pesticide Contamination." Journal of the American Institute for Conservation, 25, (1986): 1-13.
- Cheng, Y.T., J.S. Olin, R.S. Carter, M. Sanczy, I.G. Schroder, and C.H. Olin. "Modification of the National Bureau of Standards Research Reactor for Neutron-Induced Autoradiography of Paintings." In Application of Science in Examination of Works of Art, eds. P.A. England and L. van Zelst, (1985), pp. 182-189. Museum of Fine Arts, Boston.
- Ehrenreich, Robert M. "Blacksmithing Technology in Iron Age Wessex." Oxford Journal of Archaeology, 5:2 (July 1986):165-185.
- Ehrenreich, Robert M. "Trade, Technology and the Ironworking Community in the Iron Age of Southern Britain, BAR British Series 144, 228 pp, (1985). Thesis Keble College, (1985).
- Erhardt, D. Analytical Appendix to "Hawaiian Oiled and Mamaki Tapa.", by N. Firnhaber. Symposium 86: The Care and Preservation of Ethnographic Materials, Ottawa, (September 1986).
- French, J.M., E.V. Sayre and L. van Zelst. "Nine Medieval French Limestone Reliefs: The Search for a Provenance." In <u>Application of Science in Exmination of Works of Art</u>, eds. P.A. England and L. van Zelst, (1985), pp. 132-141. Museum of Fine Arts, Boston.
- Frolich, Bruno, and Warwick J. Lancaster. "Electromagnetic Surveying in Current Middle Eastern Archaeology: Application and Evaluation." Geophysics, 51:7 (July, 1986): 1414-1425,
- Garbin, Mary. "Conservation at the German Leather Museum." <u>Leather</u> Conservation News, 2:2 (1986):14-15.
- Gianno, R. "The Exploitation of Resinous Products in a Lowland Malayan Forest." Wallaceana, 42 (1986): 3-6.

- Gianno, R. "Resin Classification Among the Semelai of Tasek Bera, Pahang, Malaysia." Economic Botany, 40:2 (1986): 186-200.
- Gianno, R. "Life into Death and Back: Curing and Cosmology in Semelai Culture." American Anthropological Association, Philadelphia, PA, December (1986).
- Goodway, Martha. "Iron and Steel: Chronology and Annotated Bibliography; Notes on Analysis of Metals." Metals for Conservators, AIC Washington, (1986).
- Goodway, Martha. "News of Archaeometallurgy", <u>SAS Newsletter</u>, 9:1 (1985): 4.
- Goodway, Martha. "News of Archaeometallurgy", SAS Newsletter, 9:2 (1986):6-7.
- Goodway, Martha. "News of Archaeometallurgy", SAS Newsletter, 9:3 (1986): 2
- Harbottle, G., E.V. Sayre and R.W. Stoenner. "The Use of Miniature Carbon-14 in Dating and Authentication in the Museum." In Application of Science in Exmination of Works of Art, eds. P.A. England and L. van Zelst, (1985), pp. 10-16. Museum of Fine Arts, Boston.
- Holmes, L.L., C.T. Little and E.V. Sayre. "Elemental Characterization of Medieval Limestone Sculpture from Parisian and Burgundian Sources". Journal of Field Archaeology, (1986):123-131.
- Kingery, W.D. and P.B. Vandiver. "Glaze Structure and Its Interaction with Light: An Example of Song Dynasty Jun Ware." <u>The Studio Potter</u>, 14:2 (1986): 23-26
- Kingery, W.D., and P.B. Vandiver. "Ceramic Masterpieces: Art, Structure, Technology", Macmillan Free Press, New York, (1986).
- Kingery, W.D., and P.B. Vandiver, "The Technology of Tiffany Art Glass", in Applications of Science in the Examination of Works of Art, eds. P.A. England and L. van Zelst, (1985) pp. 100-116. Museum of Fine Arts, Boston.
- Kingery, W.D. and P.B. Vandiver, "The Eighteenth Century Change in Technology and Style from the Famille-Verte Palette to the Famille-Rose Palette", in W.D. Kingery, <u>Ceramics and Civilization</u>, Vol. II, The American Ceramic Society, Columbus, OH (1986).
- Lahanier, C.H., F.D. Preusser, and L. van Zelst. "Study and Conservation of Museum Objects: Use of Scientific Techniques." <u>Nuclear Instruments and Methods in Physics Research</u>, B14, (1986): pp. 1-9.
- Myers, J.E., and Blackman, M.J. "Conical Plates of the Hispano-Moresque Tradition from Islamic Qsar es-Seghir: Petrographic and Chemical Analysis". In La Ceramica Medievale nel Mediterraneo Occidentale, (1986). pp. 55-68. All Insegna Del Giglio, Firenze.
- Sayre, Edward V. "History and Development of Conservation Related Computer Technology." <u>Computer Technology for Conservation</u>, pp. 11-24. (1986). International Institute for Conservation Canadian Group.
- van der Reyden, Dianne. "Technology and Treatment of a 19th Century American Time Globe", <u>New Directions in Paper Conservation</u>, Preprints, The Institute of Paper Conservation, Oxford, England, (1986).
- van der Reyden, Dianne., and D. Williams. "The Technology and Conservation Treatment of a 19th Century English 'Papier Mache' Chair", Preprints: The American Institute for the Conservation of Historic and Artistic Works, Washington (1986), pp. 125-142.

- van der Reyden, Dianne., T. Vitale, N. Ash, A. Dwan, D. Hamburg, M. Mickelson, and K. Nicholson. eds. <u>Paper Conservation Catalog</u>, Third Edition, (1986), Book and Paper Group of the American Institute for Conservation, Washington DC.
- van der Reyden, Dianne. "Humidification", Part 22, in <u>Paper Conservation</u>
 <u>Catalog</u>, Third Edition, (1986), Book and Paper Group of the American
 <u>Institute for Conservation</u>, Washington DC.
- Vandiver, P.B. "The Production Technology of Earthenware Ceramics, 4900-2800 B.C.", in T.W. Beale and C.C. Lamberg-Karlovsky, eds. Excavations at Tepe Yahya, Iran, 1967-1975: The Early Periods", American School of Prehistoric Research, Bull. 38, Peabody Museum, Harvard University, (1986).
- Vandiver, P.B., and C.G. Koehler, "Structure, Processing, Processing, and Style of Corinthian Transport Amphoras", in W.D. Kingery, Ceramics and Civilization, Vol. II, The American Ceramic Society, Columbus OH (1986).
- Vandiver, P.B., and W.D. Kingery, "Manufacture of an Eighteenth Dynasty Egyptian Faience Chalice", in M. Tite and I. Freestone, Conference on Early Vitreous Materials, British Museum Occasional Papers, (1986).
- van Zelst, L. "Technical Examination of Terracottas", in <u>From Indian</u>
 <u>Earth: 4000 Years of Terracotta Art</u>, pp. 67-69, (1986), The Brooklyn Museum, NY.
- van Zelst, L., P.A. England eds. "Application of Science in the Examination of Works of Art." (1985), Museum of Fine Arts, Boston,.
- Vitale, Timothy. "Introduction: A Book and Paper Group Panel Discussion on Ethics", The Book and Paper Group Annual BPB/AIC, Vol. 4, (1985), pp. 116-117.
- Vitale, Timothy. "Observations on Theory, Use and Fabrication of the Fritted Glass Bead Suction Disk Device", New Directions in Paper Conservation, Preprints: The Institute of Paper Conservation, Oxford England, (1986).
- Vitale, Timothy. "Humidification", Part 22, in <u>Paper Conservation</u>
 <u>Catalog</u>, Third Edition, (1986), Book and Paper Group of the American
 Institute for Conservation, Washington DC.
- Vitale, Timothy. "Drying / Flattening", Part 28, in <u>Paper Conservation</u>
 <u>Catalog</u>, Third Edition, (1986), Book and Paper Group of the American
 Institute for Conservation, Washington DC.
- Wright, Rita P. "The Boundaries of Technology and Stylistic Change." In W.D. Kingery, ed. <u>Technology and Style, Vol. II, Ceramics and Civilization</u>, The American Ceramic Society, Columbus, OH (1986), pp. 1-20.
- Williams, Marc. "Furniture Conservation: An Introduction and History." Antique Review, 12:8 (1986), pp. 24-25.
- Williams, Marc. "Furniture Conservation Ethics." Antique Review, 12:9 (1986), pp. 30-31.

Papers Presented at Technical Meetings

Bishop, Ronald. "From Neutron to Ritual Communication, Aspects of Science Application in Archaeology." Opening of the Sackler Exhibition of Costa Rican Pottery, Duke University, November 1985.

- Erhardt, David. "The Wright Flyer: Organic Materials Analysis."

 Fourteenth Annual Meeting of the American Institute for Conservation,
 Chicago, IL, May 1986.
- Gianno, R. "The Exploitation of Resinous Products in a Lowland Malayan Forest." Society for Economic Botany, New York Botanical Garden, June 1986.
- Goodway, Martha. "Phosphorus in Iron Wire and How it Got There." 25th Archaeometry Symposium, Athens, Greece, 20 May 1986.
- Kingery, W.D., and P.B. Vandiver. "Eighteenth Century Change on Technology and Style of Overglaze Enamels." Second International Conference on the HIstory of Chinese Pottery and Porcelain, Beijing, China, Nov. 1986.
- McMillan, Eleanor. "Research and Conservation." Session on Planning for Conservation, 1986 Meeting of the American Association of Museums, New York, June 1986.
- Mishara, Joan. "X2 A Geochemical Synthesis at Ancient Laurion." Archaeometry Symposium, Athens, Greece, May 1986.
- Padfield, Tim. "Monitoring the Microclimate in the Reconstructed Facade of the Renwick Gallery." Annual Conference of the Association for Preservation Technology, San Francisco, CA, September 1985.
- Padfield, Tim. "Condensation Within the Roof of the Arts and Industries Building of the Smithsonian Institution." Poster at the 5th International Conference on the Deterioration and Preservation of Stone, Lausanne, Switzerland, September 1985.
- Padfield, Tim. "Climate Control in Museums." National Conference on Museum Security, Washington, D.C., February 1986.
- Padfield, Tim. "Microclimate Measurement in the Walls of the Renwick Gallery." Washington D.C. Chapter of the Association for Preservation Technology, March 1986.
- Padfield, Tim. "Joan of Arc and the Bicycle Race." (on the behavior of soluble salts on fibrous materials), New South Wales Group of the Institute for the Consevation of Cultural Material, Sydney, Australia, August 1986.
- Padfield, Tim. "The Effect of Temperature Change on the Movement of Moisture in Absorbent Materials." Keynote Address to the Annual Meeting of the Institute for the Conservation of Cultural Material, Adelaide, South Australia, August 1986.
- Padfield, Tim. "The Effect of the Player's Breath on the Dimensional Stability of Woodwind Instruments." Annual meeting of the ICCM, Adelaide, South Australia, August 1986.
- Padfield, Tim. "Controlling the Microclimate Around Museum Objects." Seminar at the ICCM Meeting, Adelaide, South Australia, August 1986.
- Padfield, Tim. "Climate Control in Libraries and Archives." Conference on the Preservation of Library Materials, Vienna, Austria, April 1986.
- van der Reyden, Dianne. "Technology and Treatment of a 19th Century American Time Globe." The Institute of Paper Conservation, 10th Anniversary Conference: New Directions in Paper Conservation, Oxford, England, 14-18 April 1986.
- van der Reyden, Dianne and D. Williams. "The Technology and Treatment of a 19th Century English 'Papier Mache' Chair." Fourteenth Annual Meeting, The American Institute for the Conservation of Historic And Artistic Works, Chicago, IL, 21-25 May 1986.

- Vandiver, P.B., and W.D. Kingery. "The Continuity in Chinese Overglaze Enamel Technology Before the Reign of K'ang Hsi." Second International Conference on the History of Chinese Pottery and Porcelain, Beijing, China, November 1985.
- Vandiver, P.B. "The Role of Macrostructure (0.1-10mm) Study in Archaeometric Research with Ceramics." Archaeometry Conference, Athens, Greece, May 1986.
- Vandiver, P.B. "Egyptian Faience: The First High Tech Ceramic."

 American Ceramics Society Conference, May 1986.
- Vitale, Timothy. "Observations on Theory, Use and Fabrication of the Fritted Glass Bead Suction Disk Device." The Institute of Paper Conservation, 10th Anniversary Conference: New Directions in Paper Conservation, Oxford, England, 14-18 April 1986.
- Williams, Don, and Marc Williams. "Why Wood Works: Furniture Deterioration and Preservation." Washington Conservation Guild, Washington, D.C., February 6, 1986.

COOPER-HEWITT MUSEUM

- McFadden, David Revere. Juror's Statement, Society of Connecticut
 Craftsmen's 50th Anniversary Exhibition, 1985.

 ----. "The 1985 Platinum Jewelry Design Competition," Metalsmith, vol.
 6, no.1 (Winter, 1986), p.24-29.

 ----. "Earthly Delights: Floral Designs in the Decorative Arts," in
 Catalogue of the 1986 New York
 Flower Show, the Horticultural Society
 of New York, 1986, p.35-37.

 ----. "Light, Glass, and Architecture," The Glass Art Society Journal;
 1986 [at press, due Autumn, 1986]

 ----. "Design Comment: An Interview with Lella Vignelli," The Glass Art
 Society Journal, 1986 [at press, due Autumn, 1986].
- Moss, Gillian. "Beyond Craft to Textile Art," American Craft

 December 1986.

 "Ancient Japanese Textiles" American Craft December 1986
- ----. "Ancient Japanese Textiles" American Craft December 1986.
- Taylor, Lisa [Foreward] <u>Niizuma</u>. Gulbenkian Foundation, Lisbon, Portugal, July 1986.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

- Fletcher, Valerie J. Surrealist Art: Selections from the Hirshhorn Museum and Sculpture Garden. Washington, DC: SITES, 1986.
- Gettings, Frank. "The Joseph H. Hirshhorn Bequest." Drawing 8, no. 2 (July-August 1986):29-32.
- Lawrence, Sidney. [Introduction and commentary] "Declaration of Function: Documents from the Museum of Modern Art's Design Crusade, 1933-1950." Design Issues 2, no. 1 (Spring 1986):65-77.

- McCabe, Cynthia Jaffee. Patricia Nix: A Full House of Fantasy. Exhibition catalogue. New York: Staten Island Institute of Arts and Sciences, 1986.
- Rosenzweig, Phyllis. Sculpture in Maryland. Exhibition catalogue. Baltimore: Art Place, 1986.
- Shannon, Joe. <u>Jack Boul and Peter DeAnna (Two Washington Painters)</u>. Exhibition catalogue. Charlotte, North Carolina: Mint Museum of Art, 1986.
- Weil, Stephen E. [Book review] "The Arts and Public Policy in the United States." The Journal of Arts Management and Law 15, no. 2 (Summer 1985):93-97.
- The Museum Management Institute: A Brief History."

 The International Journal of Museum Management and

 Curatorship 4, no. 3 (September 1985):265-271.
- . "Legal Aspects of the Display of Imitations in Museums of Art in the United States." In Originals and Substitutes in Museums. ICOFOM Study Series no. 8. Zagreb, Yugoslavia, 1985.
- _____. "Questioning Some Premises." Museum News 64, no. 5

 (June 1986):20-27.
- Weil, Stephen E., and Franklin Feldman. Art Law: Rights and Liabilities of Creators and Collectors. Boston: Little, Brown and Company, 1986.
- Zilczer, Judith. "Synaesthesia and Popular Culture: Arthur Dove, George Gershwin, and the Rhapsody in Blue." Art Journal 44, no. 4 (Winter 1984):361-66.
- no. 14. (New York Dada issue, 1985):31-43; concurrently published in Rudolf E. Kuenzle, ed. New York Dada. New York: Willis Locker and Owen Publishing, 1986.
- Zilczer, Judith, William C. Agee, and Peter Morrin. The Advent of Modernism: Post-Impressionism and North American Art, 1900-1918. Atlanta: High Museum of Art, 1986.

NATIONAL MUSEUM OF AFRICAN ART

- Bertin, Margaret. (General exhibition brochure) A Human Ideal in African Art: Bamana Figurative Sculpture. Washington, D.C.: National Museum of African Art, 1986.
- A Century of Tabwa Art. Washington, D.C.: National Museum of African Art, 1986.
- Habraken, Kim. (Teachers' guide) A Human Ideal in African Art: Bamana

 Figurative Sculpture. Washington, D.C.: National Museum of African

 Art, 1986
- . (Teachers' guide) The Rising of a New Moon: A Century of Tabwa Art. Washington, D.C.: National Museum of African Art, 1986.
- Luskey, Judith. Go Well, My Child: Photographs by Constance Stuart

 Larrabee in Collaboration with Alan Paton. Washington, D.C.: National

 Museum of African Art, 1986.
- and Fleming, Paula. The North American Indians in Early

 Photographs. London, England: John Calmann & King, Ltd. New York,

 N.Y.: Harper & Row. Fall, 1986.

- National Museum of African Art, Department of Education. The Art of West

 African Kingdoms, ed. Dean Trackman and photo ed. Judith Luskey.

 Washington, D.C.: National Museum of African Art, 1986.
- Taylor, Alicia. National Museum of African Art Education Programs and Resources, 1985-1986. Washington, D.C.: National Museum of African Art, 1985.
- Turgel, Marjorie. (Brochure) Outreach Program, Winter 1986-87. Washington, D.C.: National Museum of African Art, 1986.
- Walker, Roslyn: "A Sculptured Mancala Gameboard Terminating in a Carved Human Head from Liberia in the Barbier-Mueller Collection." <u>Bulletin</u>. Geneva, Switzerland: Musée Barbier-Mueller, September, 1986.

NATIONAL AIR AND SPACE MUSEUM

Office of the Director

Boyne, Walter J. Phantom in Combat, 1985. Reprint. United Kingdom:
Jane's Publishing Company, Limited, 1986
Boeing B-52: A Documentary History, 1981. Reprint. United
Kingdom: Jane's Publishing Company Limited, 1986
. Aircraft Treasures of Silver Hill, 1982. Reprint. New York:
Rawson Associates, 1986
. "America's DH-4." British Aerospace Quarterly 7(2)
Summer (1986).
. "Report of the Director." In National Air and Space
Museum Research Report, 1985, pp.7-11, Washington, D.C.:
Smithsonian Institution Press, 1985.
. "Columbia Triad." Air Line Pilot 54(10) (1985).
. "Where The Leading Edges Lead." AOPA Pilot 28(11) (1985).
. "Berliner Joyce XOI-1." Air Line Pilot 54(11) (1985).
. "North American XB-28." Air Line Pilot 54(12) (1985).
. "McDonnell XV-1." Air Line Pilot 55(1) (1986).
. "Curtiss Wright Travel Air 68." Air Line Pilot 55(2)
(1986).
"The Active Museum: Stimulating Public Involvement in
Aerospace." Journal of the Washington Academy of Sciences
76(1) pp. 1-11, March (1986).
. "Hurel Dubois H.D. 10." Air Line Pilot 55(3) (1986).
. "Hurel Dubois H.D. 10." <u>Air Line Pilot</u> 55(3) (1986) "Experimental Aircraft." <u>Air University Review</u> 37(2)
(1986).
. "Putting the Smithsonian On Disc." CD-ROM News
Spring (1986).
. "Whittlesley Avian." Air Line Pilot 55(4) (1986).
. "Dayton-Wright XB-1A." Air Line Pilot 55(5) (1986).
. "Curtiss XP-60C." Air Line Pilot 55(6) (1986).
. "Fernic P-10 Cruisaire." Air Line Pilot 55(7) (1986).
. "Bell Bartoe Jetwing." Air Line Pilot 55(8) (1986).
Office of the Deputy Director
Lopez, Donald S. Flight: Great Planes of the Century. New
York: Viking Penguin Inc., 1985.
. Into the Teeth of the Tiger. New York:
Bantam Books, 1986.

Office of the Associate Director for Research

- Hanle, Paul A., "New Directions in Research." In <u>National Air and Space</u>

 <u>Museum Research Report 1985</u>, pp. 13-16. Washington, D.C.:

 Smithsonian Institution Press, 1985.
- _____. "A System for Digital Display of Historical Documents." In National Air and Space Museum Research Report 1985, pp. 173-176. Washington, D.C.: Smithsonian Institution Press, 1985.
- Washington, D.C.: Smithsonian Institution Press, 1985.

 Review of JPL and the American Space Program: A History of the Jet Propulsion Laboratory by Clayton R. Koppes. Technology and Culture, October 1985, pp. 877-879.
- Smith, Robert W., Review of <u>Beyond Velikovsky</u>: The History of a Public <u>Controversy</u>, by H. Bauer, <u>Isis</u>, 76 (1985), pp. 428-429.

Office of Associate Director for External Affairs

Duff, Brian. "The Dream Is Alive: The Story Behind a Historic Film." In National Air and Space Museum Research Report, 1985, pp. 195-201. Washington, D. C.: Smithsonian Institution Press, 1985.

Department of Aeronautics

- Davies, R.E.G. "Unusual Service to Micronesian Island." The Airport Journal 58(1)(1986):12-13.
- Douglas, Deborah G. "Edward H. 'Ed' Heinemann and Clarence L. 'Kelly' Johnson: Designers for the Jet Age." In <u>National Air and Space Museum Research Report 1985</u>, pp.149-155. Washington, D.C.: Smithsonian Institution Press, 1985.
- _____. "Smithsonian Institution Accessions Scheffelin/DACOWITS Collection." Minerva IV (Spring (1986): pp. 6-9.(1986):6-9.
- _____. Langford, John S., and Cruz, Juan R. "The Feasibility of Daedalus: A Human-Powered Flight Between Crete and the Mainland of Greece." Proceedings of the Third Human-Powered Vehicle Scientific Symposium, August 28-29, 1986. pp. 2-12. United States: International Human-Powered Vehicle Association, 1986.
- . Langford, John S., et al. The Feasibility of a Human-Powered Flight Between Crete and the Mainland of Greece: Final Report of the Daedalus Project Working Group. Boston: Massachusetts Institute of Technology, 1986.
- Hardesty, Von D., editor. <u>Gatchina Days: Reminiscences of a Russian Pilot</u>, <u>Alexander Riaboff</u>. Washington, D.C.: Smithsonian Institution Press, 1986.
- Leyes, Richard A. "History of the Wiseman-Cooke Aircraft."

 World War I Aero 108 (February) (1986):3-10.
- Lissarrague, Pierre and Christienne, Charles. A History of French Military Aviation. Translated by Frances Kianka. Washington, D.C.: Smithsonian Institution Press, 1986.

- Mikesh, Robert C. and Crouch, Tom D. "Restoration: The Wright Flyer."

 In National Air and Space Museum Research Report 1985, pp. 135-141.

 Washington, D.C.: Smithsonian Institution Press, 1985.
- . "Wright Flyer Restoration." World War I Aero 108 (February) (1986):13-17.
- van der Linden, F. Robert and Winter, Frank. "Out of the Past."
 Aerospace America. (Monthly Column).
- Wooldridge, E. T. <u>Images of Flight: The Aviation Photography of Rudy Arnold</u>. Washington, D.C.: Smithsonian Institution Press, 1986.

 ______. "Chairman's Overview: Department of Aeronautics." In National
- Air and Space Museum Research Report 1985, pp. 19-21, Washington, D.C.: Smithsonian Institution Press, 1985.
- . "Grumman at the Smithsonian." Grumman Horizons 22(1)(1986):14-20.

Center for Earth and Planetary Studies

- Andre, C. G. [Abstract]. "Lithologic Mapping Using Thermal Infrared Satellite Data." In National Air and Space Museum Research Report, 1985, pp. 215-16. Washington, D.C.: Smithsonian Institution Press, 1985.
- Bougan, S., Greeley, R. and Marshall, J. [Abstract]. "Aeolian Environment on Venus." In <u>Lunar and Planetary Science XVII</u>, pp. 74-75. Houston: The Lunar and Planetary Institute, 1986.
- Frey, H. V., Schultz, R. A., and Maxwell, T. A. [Abstract] "The Martian Crustal Dichotomy." In <u>Lunar and Planetary Science XVII</u>, pp. 241-242. Houston: The Lunar and Planetary Institute, 1986.
- Hooper, D. M. and Maxwell, T. A. [Abstract]. "Equatorial Clustering of Craters and Multi-ring Basins: Possible Indications of lunar polar displacement." In Reports of Planetary Geology and Geophysics Program, 1985, pp. 131-33. NASA TM-88383, 1986.
- . [Abstract]. "Distribution of Lunar Craters and Multi-ring basins: A Test for Lunar Polar Wandering." In <u>Lunar and Planetary Science XVII</u>, pp. 356-357. Houston: The Lunar and Planetary Institute, 1986.
- Jacobberger, P. A. "Geomorphology of the Upper Inland Niger Delta."
 In <u>National Air and Space Museum Research Report</u>, 1985, pp. 116-31.
 Washington, D.C.: Smithsonian Institution Press, 1985.
- . [Abstract]. "Drought-related Surface Changes in the Upper Inland Niger Delta of Mali." In <u>Geological Society of America GSA Abstracts with Programs</u> 17 (1985):617.
- Leff, C. and Maxwell, T. A. [Abstract]. "Definition of Tectonic
 Domains in the Eastern Hemisphere of Mars." In EOS, 67 (1986):300.
- Marshall, J. R., Greeley, R., Fox, D., Bougan, S., and Sheridan, M. [Abstract]. "Transverse Bedforms in High-density Fluids: Venus and Earth." In Reports of Planetary Geology Program 1985, p. 257. NASA TM-88383, 1986.

- Maxwell, T. A., "Chairman's Overview: Center for Earth and Planetary Studies." In <u>National Air and Space Museum Research Report, 1985</u>, pp. 113-115. Washington, D. C.: Smithsonian Institution Press, 1985.
- . [Abstract]. "The Mars Dichotomy: Investigations of the Ancient Cratered Terrain - Smooth Plains Boundary." In <u>National</u> <u>Air and Space Museum Research Report, 1985</u>, pp. 221-22. Washington, D.C.: Smithsonian Institution Press, 1985.
- Maxwell, T. A., Leff, C., Hooper, D., and Doorn, P. [Abstract].

 "The Mars Hemispheric Dichotomy: Morphology and Stratigraphic
 Implications of Viking Color Data." In <u>Geological Society of America Abstracts with Programs</u> 17 (1985):655.
- Maxwell, T. A. [Abstract]. "Spectral Studies of the Cratered Terrain Boundary of Mars: Inferences for Geologic Evolution." <u>EOS</u> 67 (1986):301.
- Watters, T. R. [Abstract]. "Basalt-Plains Ridges: Analogs and Fold Mechanisms." In <u>National Air and Space Museum Research Report</u>, 1985, pp. 225-26. Washington, D.C.: Smithsonian Institution Press, 1985.
- Watters, T. R. and Maxwell, T. A. [Abstract]. "Ridges of the Tharsis and Columbia Plateaus: A Fold Model." In <u>Geological Society</u> of America Abstracts with Programs 17 (1985):745.
- . [Abstract]. "The Tharsis Plateau Ridge System: Inferred and Predicted Compressive Stresses." In Reports of Planetary Geology Program 1985, pp. 406-08. NASA TM-88383, 1986.
- _____. [Abstract]. "Strain Estimates for Basalt Plains Ridges on Mars, Earth and the Moon." In <u>Lunar and Planetary Science XVII</u>, pp. 929-30. Houston: The Lunar and Planetary Institute, 1986.
- _____. "Orientation, Relative Age, and Extent of the Tharsis Plateau Ridge System." <u>Journal of Geophysical Research</u> 91 (1986):8113-25.

Department of Exhibits, Art Unit

Olson, R. J. M. <u>Fire and Ice: A History of Comets in Art</u>. New York: Walker and Company, 1985.

Department of Space Science and Exploration

- Ceruzzi, Paul E. "The Unforseen Revolution: Computers and Expectations." Joe Corn, ed. In <u>Imagining Tomorrow</u>. Cambridge, MA: MIT Press, 1986.
- _____. Introduction to the reprint of the Harvard Computation

 Laboratory's A Manual Operation for the Automatic Sequence Controlled

 Calculator. Reprint of 1946 ed. Cambridge, MA: MIT Press, 1985.
- . "The First Generation of Computers and the Aerospace Industry." In National Air and Space Museum Research Report, 1985, pp. 75-89. Washington D.C.: Smithsonian Institution Press, 1985.
- Review of IEM's Early Computers by Charles Bashe, et. al. IEEE Spectrum. June, 1986. pp. 12-14.
- . Review of <u>Punched Card Methods in Scientific Computation</u> by Wallace J. Eckert and Calculating Machines by D. R. Hartree. ISIS 77 (1986), pp. 154-156.

- _____. Review of <u>Der Computer, Mein Lebenswerk</u>, 2nd. ed. by Konrad Zuse. Annals Hist. Comp 8 (1986), p. 317.
- Callen, Thomas H, II. "Comet Quest: Capturing the Lore and Lure of Halley: In National Air and Space Museum Research Report, 1985, pp. 157-166. Washington, D.C.: Smithsonian Institution Press, 1985.
- Collins, Martin J. [with David H. DeVorkin]. "Space Astronomy Oral History Project." In National Air and Space Museum Research Report, 1985, pp. 203-208. Washington D.C.: Smithsonian Institution Press, 1985.
- DeVorkin, David H. "The Supernova of A.D. 1006." The Astronomy Quarterly 5 (1985), pp. 71-86.
- . "Chairman's Overview: The Space Science and Exploration
 Department." In National Air and Space Museum Research Report, 1985,
 pp. 71-74. Washington D.C.: Smithsonian Institution Press, 1985.
- ______. "Steps Toward the Hertzsprung-Russel Diagram." Reprinted in Spencer R. Weart and Melba Phillips, eds. <u>History of Physics</u>, pp. 50-57. New York: American Institute of Physics, 1985.
- M. O. Robins. Science 233 (1986), p. 373.
- . "Richard Tousey and His Beady-Eyed V-2s." Air & Space/Smithsonian Magazine 1(2) (1986), pp. 86-94.
- Ezell, Linda N. "Science and Technology in the Twentieth Century." Robin Higham and Donald J. Mrozek, eds. In A Guide to the Sources of United States Military History: Supplement II. Hamden, CT: Archon Books, 1986.
- Gruen, Adam L. "The Space Station: Visions and Visionaries." In National Air and Space Museum Research Report, 1985, pp. 209-214. Washington, D.C.: Smithsonian Institution Press, 1985.
- Hill, Janice L. "Restoration: The ATS-6." In <u>National Air and Space</u>
 <u>Museum Research Report</u>, 1985, pp. 143-148. Washington D.C.:
 Smithsonian Institution Press, 1985.
- Needell, Allan A. "Exploring Space Lecture Series: Our Solar System." In <u>National Air and Space Museum Research Report, 1985</u>, pp. 169-172. Washington D.C.: Smithsonian Institution Press, 1985.
- Tatarewicz, Joseph, N. FilmReview of "Space Science: Space Shuttle-Yesterday, Today, and Tomorrow.": Science Books and Films 21(1) (1985), p. 55.
- . "A Strange Plea: The Campaign for Planetary Astronomy in Support of Solar System Exploration, 1959-1962." In National Air and Space Museum Research Report 1985, pp. 91-109. Washington, D. C.: Smithsonian Institution Press, 1985.
- _____. "The Persistence of Lowell's Legacy: Life, Mars, and the U.S. Space Program, 1958-1967." (Abstract) <u>Bulletin of the American Astronomical Society</u> 17(4) (1985), p. 828.
- _____. Filmstrip review of "Earth, Moon, Sun, and Space." Science Books and Films 21(3) (1986), p. 182.
- . "Federal Funding and Planetary Astronomy." Social Studies of Science 16(1) (February 1986), pp. 80-103.
- _____. Filmstrip review of "Comet Halley: Once in a Lifetime. <u>Science</u>

 Books and Films 21(4) (1986), p. 323.

- Winter, Frank H. "The Golightly Mystery." <u>Journal of the British</u>
 <u>Interplanetary Society</u> 39(4) (1986), pp 170-176.
 - . "Lighting the Fuse: Rocket Society." <u>Timeline</u> 3(5)
 (Publication of the Ohio Historical Society) (1986), pp. 14-25.
- Winter, Frank H. and van der Linden, F. R. "Out of the Past."

 Aerospace America. (Monthly Column).

Information Management Division

- National Air and Space Museum, Archival Videodisc III: U.S.A.F. Collection, Washington, D.C., 1985.
- Suthard, Karl P. "Documentary Collections and Facilities." In National Air and Space Museum Research Report, 1985, pp. 227-237. Washington, D. C.: Smithsonian Institution Press, 1985.

NATIONAL MUSEUM OF AMERICAN ART

- Broun, Elizabeth, with Lucy R. Lippard. <u>Patrick Ireland: Drawings</u> 1965-1985. Washington, D.C.: Smithsonian Institution Press, 1986.
- Eldredge, Charles C.; Schimmel, Julie; and Truettner, William H. Art in New Mexico, 1900-1945: Paths to Taos and Santa Fe. New York: Abbeville Press, 1986.
- Fink, Lois M. "Academic Art and the Art of Illustration." In Frank E.
 Schoonover at Drexel: Illustration and the Academic Tradition, 1892-1903.
 Philadelphia: Drexel University Museum, 1986.
- Dillenberger. Archives of American Art Journal, XXV, 1 & 2 (1985).

 [Preface] American Art Analog. Chelsea House Publishers, 1986.
- . "Rembrandt Peale in Paris." Pennsylvania Magazine of History and Biography CX, 1 (January 1986).
- Hartigan, Lynda Roscoe. "A Note on Joseph Cornell's 'Goop Joe's weekly Pultry Pages.'" Motion Picture (Fall 1986).
- . [Brochure] Afro-American Art: Twentieth-Century Selections.
 Washington, D.C.: Smithsonian Institution Press, 1986.
- Hennessey, Christine M. "The Status of Name Authority Control in the Cataloging of Original Art Objects," Art Documentation V, 1 (Spring 1986).
- Norelli, Martina Roudabush. [Brochure] Art, Design, and the Modern Corporation: The Collection of the Container Corporation of America, A Gift to the National Museum of American Art. Washington, D.C.: Smithsonian Institution Press, 1986.
- , with Neil Harris. Art, Design, and the Modern Corporation: The Collection of the Container Corporation of America, A Gift to the National Museum of American Art. Washington, D.C.: Smithsonian Institution Press, 1986.
- Panhorst, Michael. Abstract and research summary on American Monument and Outdoor Sculpture (AMOS) Data Base, published by National Acid Precipitation Assessment Program, Washington, D.C., for North Carolina State University Peer Review, April 1986.

- Abstract and research summary on comparative study of corrosion of monumental bronze statue replicas, co-authored with David Ames, published by the National Acid Precipitation Assessment Program, Washington, D.C., for North Carolina State University Peer Review, April 1986.
- Powell, Richard J. "William H. Johnson's Minde Kerteminde," Siksi: The Nordic Art Review, no. 1 (1986).
- Wallach, Allan. Review of Thomas Eakins: The Heroism of Modern Life by Elizabeth Johns. Archives of American Art Journal 24, no. 4 (1984).
- Review of Latrobe's View of America, 1759-1820: Selections from the Watercolors and Sketches, edited by Edward C. Carter II, John C. Van Horne and Charles E. Brownell. Pennsylvania Magazine of History and Biography, 110, no. 3 (July 1986).

NATIONAL MUSEUM OF AMERICAN HISTORY

Department of the History of Science and Technology

- Crouch, Tom D. "How the Bicycle Took Wing." American Heritage of Invention and Technology (Summer 1986): 10-17.
- . "A Machine of Practical Utility: The 1905 Wright Flyer." <u>Timeline</u> (October/November 1985): 24-37
- . "Restoration: The Wright Flyer." In NASM Research Report, 1985: 135-41. Washington, D.C.: Smithsonian Institution Press.
- Daniel, Pete. Standing at the Crossroads: Southern Life in the Twentieth Century. New York: Hill & Wang, 1986.
- Davis, Audrey B. "Medicine Through the Lens of the Museum." <u>Caduceus</u> 1 (Autumn 1985): 38-41.
- . *Dental Craftsmen in 19th-Century America.* In Nineteenth Century Scientific Instruments and Their Makers, edited by Peter R. de Clerq, 241-61. Leiden, The Netherlands: 1985.
- Dreyfuss, Mark. "Trephined Skulls." Medical Heritage 1, no. 5 (September/ October 1985): cover notes.
- . "Nurse's Saddlebag." <u>Medical Heritage</u> 1, no. 6 (November/December 1985): 447.
- . "The Anatomical Models of Dr. Auzoux." Medical Heritage 2, no. 1 (January/February 1986): 60-62.
- "Social Necessaire." Medical Heritage 2, no. 3 (May/June 1986):
- . "Yoruba Diviner's Bowl." Medical Heritage 2, no. 3 (May/June 1986): cover notes, 232.
- . "Veterinary Surgery." Medical Heritage 2, no. 4, (July/August 1986): 242.
- Ezell, Edward C. Foreword and bibliographical essay to The Social History of the Machine Gun, by John Ellus. Baltimore: Johns Hopkins University Press, 1986.
- . The AK47 Story: Evolution of the Kalashnikov Weapons. Harrisburg, Pa.: Stackpole Books, 1986.
- . "The Advanced Combat Rifle: Will the Infantryman Get the Weapons He Needs to Fight and Win in the 1990s and Beyond?" Combat Weapons 2, no. 1 (Winter 1986): 35-39; 92-94.
- . "The Weapons 1945-1975: New Equipment and Tactics Change the Face of War Forever," Back to Battle 2, no. 1 (February 1986): 22-35; 93; 100-101.

- , and R. Blake Stevens. The SPIW: The Deadliest Weapon that Never Was. Collector Grade Publications, Inc., 1985
- , John F Sullivan, and John S. Wood, Jr. Desert Warfare: Lessons Learned Study. Arlington, Va.: Security Arms Company, Inc., 1985.
- . "Selecting Infantry Support Weapons." Defense Minister and Chief of Staff 2 (1985): 45-49.
- Finn, Bernard, Robert Friedel, and Paul Israel (H. David Maxey, Collaborator). Edison's Electric Light: Biography of an Invention. New Brunswick: Rutgers University Press, 1986.
- Forman, Paul. "The First Atomic Clock Program: NBS, 1947-1954."

 Proceedings of the 17th Annual Precise Time and Time Interval Applications
 and Planning Meeting, 1985, 12.3-6 (1986): 1-17.
- no. 64 (September 1986): 51-62.
- Paul Boyer, by the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age. Bulletin of the Atomic Scientists (April 1986): 48-49.
- . "Il Naturforscherversammlung a Nauheim del settembre 1920: una introduzione all vita scientifica nella Republica di Whemar." In La ristrutturazione delle scienze tra le due guerre modiali, edited by G. Battimelli, M. DeMaria, and A. Rossi, 59-78. Vol. 1 of L'Europa. Rome: goliardica, 1986.
- Kidwell, Peggy. *E. C. Pickering, Lydia Hinchman, Harlow Shapley and the Beginning of Graduate Work at the Harvard College Observatory. ** Astronomy Quarterly 5 (1986): 157-62.
- , with Juanita Morris. Smithsonian Computer History Project: A combined index to oral histories open to readers. Washington, D.C.: Smithsonian Institution, 1986.
- Langley, Harold D. "Robert F. Stockton." In <u>Naval Command Under Sail</u> edited by James Bradford. Annapolis, Md.: V. S. Travel Institute Press, 1985.
- . "Medical Men of the Old Navy: A Study in the Development of a Profession." In New Aspects of Naval History, edited by Frederick Harrod. Baltimore: The Nautical and Aviation Publishing Company of America, 1986.
- Lubar, Steven. "History in a Federal Museum: The Smithsonian's National Museum of American History." In <u>Public History: An Introduction</u>, edited by Emory Kemp. Melbourne, Fla.: Krieger Publishing, 1986.
- Report on Conference Proceedings, "Interpreting the Industrial Heritage." In Proceedings, Fifth International Conference on the Conservation of the Industrial Heritage, 1986.
- . "Museum Review: The Computer Museum." <u>Technology and Culture</u> (January 1986).
- _____, and Carlene Stephens. "A Place for Public Business: The Material Culture of the Nineteenth-Century Federal Office." Business and Economic History 15 (1986): 159-73.
- Melosh, Barbara, and Christina Simmons. "Exhibiting Women's History." In Presenting the Past, edited by Susan Porter Benson, Stephen Brier, and Roy Rosenzweig. Philadelphia: Temple Univ. Press, 1986.
- _____. *Dramas of Discovery: Medical History in Federal Theatre Plays.*

 Medical Heritage 2, no. 1 (January/February 1986).
- . "Medicine in Diego Rivera's <u>Detroit Industries</u>." <u>Medical Heritage</u> 2, no. 2 (March/April 1986): 122-25.
- Post, Robert C., "The Cars Won't Fly." Air & Space 1 (August/September 1936): 76-84.

- . "In Praise of Top Fuelers." American Heritage of Invention and Technology 1 (Spring 1986): 58-63.
- . "Tancook Island: Birthplace of the Tancook Whler." Quarterboard (Maine Maritime Museum) (Spring 1986): 4-5.
- . The Tancook Whalers: Origins, Rediscovery, and Revival. Bath: Maine Maritime Museum, 1986.
- . "Von Daimler und Benz zu Garlits und Beck." Kultur & Technik 10 (Heft 2, 1986): 114-23.
- Reingold, Nathan. "Ritual Acts." Isis (December 1985).
- White, Jr., John H. The Great Fellow Fleet: A History of American Refrigerator Cars. San Marino, Calif.: Golden West Books, 1986.
- . "Containers: An Idea Whose Time Came Centuries Ago." <u>Intermodal</u>
 Age International (October 1985): 42-44.
- . "An Early Chapter in Freight Handling, Cincinnati and the Container." Queen City Heritage 43, no. 3 (Fall 1985): 25-34.
- . "Steam in the Streets: The Grice and Long Dummy." Technology and Culture 27, no. 1 (January 1986): 106-09.
- . "America's Most Noteworthy Railroaders." Railroad History 154 (Spring 1986): 9-15.
- [Barney N. Smith, pseud.]. "More Car Builders." Railroad History
 154 (Spring 1986): 128-31.
- Withuhn, William L. Banquet Address, National Railway Historical Society's 50th Anniversary Convention. Railfan & Railroad 6, no. 1, (January 1986): 47-49.
- White, Roger B. "At Home on the Highway." American Heritage 37, no. 1 (December 1985): 98-105.
- Worthington, William E., Jr., Beyond the City Lights: American Domestic Gas Lighting Systems. Washington, D.C.: National Museum of American History, 1985.

Department of Social and Cultural History

- Ahlborn, Richard E. The San Antonio Missions: Edward Everett and the American Occupation, 1847. Fort Worth: Amon Carter Museum, 1986.

 The Penitente Moradas of Abiquiu. Reprint with new introduction.
- Washington D.C.: Smithsonian Institution, 1986.
- Bird, Larry. "The Father of Political TV 'Spots'." Campaigns and Elections. (Winter 1986): 68-72.
- Fesperman, John T., Entries in The New Harvard Dictionary of Music. Cambridge, Mass.: Belknap Press, 1986.
- _____, trans. and ed. The Organs of Mexico City Cathedral, by D.A. Flentrop. Washington, D.C: Smithsonian Institution Press, 1986.
- G.A. 100: The Centenary of the Division of Graphic Arts. An Exhibition at the National Museum of American History. Washington, D.C.: Smithsonian Institution, 1986.
- Harris, Elizabeth M. "Printing and a Museum." Printing History 2, no. 2 (1985).
- Hoover, Cynthia Adams. "Secular Music in Early Massachusetts.: In Music in Colonial Massachusetts. Vol. 2. Boston: Colonial Society of Massachusetts, 1985.

- Kulik, Gary B. "Dams, Fish, and Farmers: The Defense of Public Rights in Eighteenth-Century Rhode Island. In The Countryside in the Age of Capitalist Transformation, edited by S. Hahn & J. Prude. Chapel Hill: University of North Carolina Press, 1985.
- Mayo, Edith, with Jerry K. Frye. "ERA: Postmortem of a Failure in Political Communications." In Rights of Passage: The Past and Future of the ERA, edited by Joan Hoff Wilson. Bloomington: Indiana University Press, 1986.
- Melder, Keith E. "Creating Candidate Imagery, Part I: The Man on Horseback. Campaigns and Elections. (Winter 1986): 6-11.
- . "Origins of the Personal Campaign." Campaigns and Elections. (May-June 1986): 46-50.
- Scheele, Carl H. Epilogue in Hollywood: Legend and Reality, edited by M. Webb. Boston: Little, Brown and Co. and Smithsonian Institution Traveling Exhibition Service, 1986.
- Wright, Helena E. "The Image Makers: The Role of the Graphic Arts in Industrialization. " IA: the Journal of the Society for Industrial Archeology 12, no. 2 (1986).
- , ed. Industrial Heritage '84: Volume 2, Proceedings. Fifth International Conference on the Conservation of the Industrial Heritage. Washington, D.C.: Society for Industrial Archeology, 1936

National Philatelic Collection

- Bruns, James H. Collection and Distribution Wagon Service (1986-1904). The Mobile Post Office Society, 1986.
- . *Star Route Mail Service. The United States Specialist 56, no. 11 (1985): 478-485.
- . *Postal Relics from Pearl Harbor. * Transit Postmark Collector (November/December 1985).
- . *Letters With Secrets: How World War I Censors Hunted Hidden Messages." The United States Specialist 57, no. 1 (1986).
- . "Here's How the Dead Letter Office Solved Those Cover Puzzles." The United States Specialist 57, no. 2 (1986).
- __. "America's Old-Time Dead Letter Detectives." Scott Stamp Monthly 6 (1986).
- . *The Railway Mail Mascot.* Stamps 215, no. 5 (1986).
 . *Cassava Versus Sweet Potato Gum.* The United States Specialist 57, no. 5 (1986).
- . "U. S. Perforated Postal Cards." Postal Stationery 28, no. 1 (1986).
- . Fifty captions for "Rarities in the National Philatelic Collection. The American Philatelist (May 1986).
- . "Quality Versus Style: Regulation and Screen Mail Wagons." The United States Specialist, 57, no. 6 (1986).
- ___. "Mail on the Move: The Introduction of Automobile Mail Service." The United States Specialist 57, no. 7 (1986).
- Collins, Herbert R. "The National Philatelic Collection: A Century of Collecting, 1886-1986. The American Philatelist (1986).
- Geraci, Joseph J. "Rates of Postage in the Republic of San Marino." Part 5. Mare Nostrum, Journal of Italy and Colonies Studies Circle 4, no. 3 (1986).

The Afro-American Communities Project

- Horton, James O. "Black Education at Oberlin College: A Controversial Commitment." Journal of Negro Education 54, no. 4 (Fall 1985): 477-99.
- . "The Black Urban Experience in American History: A Comment." In The State of Afro-American History, edited by Darlene Clark Hine. Baton Rouge, La.: Louisiana State University Press, 1986.
- . "Freedom's Yoke: Gender Conventions among Antebellum Free Blacks." Feminist Studies 12, no. 1 (Spring 1986): 51-76.
- "King: Out in Front in March for Equality: Leader Symbolizes 350-Year Struggle for Black Civil Rights." Orlando Sentinel (January 19, 1986): H-1
- . "Weevils in the Wheat: Northern Free Blacks and the Constitution before the Civil War." This Constitution 1, no. 8 (Fall 1985): 4-11.
- Walker, Lea H. "Representing Cultural Diversity: A Responsibility of History Museums." Journal of the Washington Academy of Sciences 1, no. 76 (June 1986): 131-132.

The Project on the Vietnam Generation

- Fauriol, Sandie. Report on the Survey of Courses on Vietnam Era Events. Washington, D.C.: Project on the Vietman Generation, 1985.
- . REPORT, quarterly newsletter of the Project on the Vietnam Generation 1, no. 2 (December 1985); 1, no. 3 (March 1986); 1, no. 4 (June 1986); 2, no. 1 (September 1986).

Department of Anthropology

- Albanese, John P. "Geology of the Mekean Site (48CK7)." In McKean/Middle
 Plains Archaic: Current Research. Edited by Marcel Kornfeld and Lawrence
 C. Todd. Occasional Papers on Wyoming Archaeology. 4(1985): 63-78.

 Laramie: Office of the Wyoming State Archaeologist.
- . "The Geology and Soils at the Colby Site." In The Colby Mammoth Site:
 Taphonomy and Archaeology of a Clovis Kill Site in Northern Wyoming.
 Edited by George C. Frison and Lawrence C. Todd. (1986). Albuquerque:
 University of New Mexico Press.
- Angel, J. Lawrence; Iscan, M. Yasar; Suchey, J. M.; and Zimmerman, M. R. "Age at Death Estimated from the Skeleton and Viscera." In <u>Dating and Age Determination</u>. Edited by Angel and Zimmerman. (1986) London: Croom-Helm.
- Angel, J. Lawrence, and Kelley, Jennifer Olsen. "Description and Comparison of the Skeleton." In The Wadi Kubbaniya Skeleton: A Late Paleolithic Burial from Southern Egypt. Edited by Fred Wendorf and Romuald Schild. The Prehistory of Wadi Kubbaniya, 1 (1986): 53-70. Dallas, Southern Methodist University Press.
- Arnoldi, Mary Jo. "Segu Puppet Theatre Form and Ideology in Bamana Performances." Empirical Studies of the Arts. 4 (2)(1986).
- . "Towards Reconstructing a History of the Segu Region Puppet Theatre." Festschrift for Renee Boser, Museum fur Volkerkunde. (1986). Basel.
- Aufderheide, Arthur C.; Angel, J. L.; Kelley, J. O.; Outlaw, A. C.; Outlaw, M. A.; Rapp, Jr., G.; and Wittmer, L. E. "Lead in Bone III. Prediction of Social Correlates from Skeletal Lead Content in Four Colonial American Populations (Catoctin Furnace, College Landing, Governor's Land and Irene Mound)." American Journal of Physical Anthropology. Anthropology. 66 (1985): 353-356.
- Boaz, Noel T.; Brooks, Alison S.; and Harris, J. W. K. "Preliminary Palaeoanthropological Results of the Semliki Research Expedition, Zaire."

 American Journal of Physical Anthropology 69 (2)(1986): 177-178.
- Brooks, Alison S. "Teaching Human Origins." Anthro-Notes 7 (3)(1985): 6-10.

 . "Ostrich eggs: a staple of Kung life." Faces (March 1986): 34-36.
- . "'Vinland' Revisited: 986-1986." Anthro-Notes 8 (1)(1986): 1-4, 14.
- . "Ishango Revisited: New Age Determination and Cultural Interpretations." In The Longest Record: The Human Career in Africa. Edited by J. W. K. Harris. A conference in Honor of J. Desmond Clark. Abstracts. (April 1986): 17-18.
- Brooks, Alison S., and Robbins, Lawrence R. "Middle Stone Age Industries of the Kalahari Basin." In The Longest Record: The Human Career in Africa. Edited by J. W. K. Harris. (April 1986): 18-19.
- Brooks, Alison S., and Selig, Ruth O. "The Viking Discovery: 1000 Years Ago."

 <u>Instructor</u> 96 (3)(October 1986): 46-48.

- Burch, Ernest S., Jr. "A Changing World." In <u>The Arctic World</u>. Principal Writer and Photographer, Fred Bruemmer. General Editor, William E. Tager. (1985): 239-244. Toronto: Key Porter Books.
- . Subsistence Production in Kivalina, Alaska: A Twenty-Year Perspective.
 Technical Paper (128)(1985). Juneau: Alaska Department of Fish and Game,
 Division of Subsistence.
- D'Azevedo, Warren. Editor. "Great Basin." <u>Handbook of North American Indians</u> 11 (1986). Washington, D. C.: Smithsonian Institution Press.
- D'Azevedo, Warren L., and Goddard, Ives. "Synonymy" in the chapter "Washoe."

 In Great Basin. Edited by Warren L. d'Azevedo. Handbook of North

 American Indians 11 (1986): 497-498. General Editor, W. Sturtevant.

 Washington, D. C.: Smithsonian Institution Press.
- Fitzhugh, William W. Cultures in Contact: the European Impact on Native Cultural Institutions in Eastern North America, A.D. 1000-1800. Edited by and with Introduction and Commentary by William W. Fitzhugh. (1985). Smithsonian Institution Press, Anthropological Society of Washington.
- . "Early Contacts North of Newfoundland Before A.D. 1600: A Review." In Cultures in Contact: the European Impact on Native Cultural Institutions in Eastern North America, A.D. 1000-1800. (1985): 23-43. Smithsonian Institution Press, Anthropological Society of Washington Series.
- . "Vegetation History and Culture Change in Labrador Prehistory." 17 (4)(1985): 357-370. Journal of Arctic and Alpine Research.
- . "Federal Arctic Research: Draft Recommendations for Necessary Programs." (1986). Interagency Arctic Research and Policy Committee Report, National Science Foundation.
- Fowler, Catherine S., and Goddard, Ives. "Synonymy" in the chapters "Southern Paiute" and "Northern Paiute." In Great Basin. Edited by Warren L. d'Azevedo. Handbook of North American Indians 11 (1986): 393-396, 461-465. W. Sturtevant, General Editor. Washington, D. C.: Smithsonian Institution Press.
- Fowler, Don D. "Clifford Evans, 1920-1981." Anuario de Divulgação Cientifica, 10 (1985): 11-14. Goias. Brazil: Catholic University of Goias.
- . "Response to 'Scholarship as Stewardship.'" (1985): 45-48. American Society for Conservation Archaeology Proceedings, 1984.
- . "Conserving American Archaeological Resources." In American Archaeology Past and Future. A Celebration of the Society for American Archaeology, 1935-1985. (1986). Washington, D. C.: Smithsonian Institution Press.
- . "Cultural Resource Management in the Great Basin: What Have We Learned?" In Anthropology of the Desert West. Essays in Honor of Jesse D. Jennings. Edited by C. J. Condie and D. D. Fowler. (1986): 169-178.

 Salt Lake City: University of Utah Press.
- . American Archaeology Past and Future. A Celebration of the Society for American Archaeology, 1935-1985. D. D. Fowler, Co-Editor. (1986). Washington, D. C.: Smithsonian Institution Press.
- D. D. Fowler, Co-Editor. (1986). Salt Lake City: University of Utah Press.

- Frison, George C. Stone Circles, Stone Filled Fire Pits, Grinding Stones and High Plains Archeology. (1985). Bozeman, Montana.
- . Clovis Tools and Weaponry Efficiency in an African Elephant Context. (1986). Report compiled for the LSB Leakey Foundation.
- Frison, George C.; Adovasio, James M.; and Carlisle, Ronald C. "Coiled Basketry from Northern Wyoming." Plains Anthropologist 31 (112)(1986): 163-167.
- Frison, George C.; Andrews, R. L.; Adovasio, J. M.; Carlisle, R. C.; and Edgar, Robert. "A Late Paleoindian Animal Trapping Net from Northern Wyoming."

 American Antiquity 51 (2)(1986): 352-361.
- Frison, George C., and Todd, Lawrence C. The Colby Mammoth Site 48WA322: A Clovis Kill in Northern Wyoming. (1986). Albuquerque: University of New Mexico Press.
- Goddard, R. H. Ives III. "Paradigmatic Splitting by Morphological Regularization: The Fox Prohibitives." <u>International Journal of American</u> Linguistics 51 (4)(1985): 419-421.
- . "Reflections of Historical Events in Some Traditional Fox and Miami Narratives." In Papers of the Sixteenth Algonquian Conference. Edited by William Cowan. (1985 [1986]): 47-62. Ottawa: Carleton University.
 - . "Synonymy" in the chapters "Western Shoshone," "Northern Shoshone and Bannock" [subgroups], "Eastern Shoshone," "Ute," and "Kawaiisu." In Great Basin, Edited by Warren L. d'Azevedo. Handbook of North American Indians 11 (1986): 279-283, 306, 334-335, 364-367, 410. W. Sturtevant, General Editor. Washington, D. C.: Smithsonian Institution Press.
- . "Technical Alphabet." In <u>Great Basin</u>. Edited by Warren L. d'Azevedo.

 <u>Handbook of North American Indians</u> 11 (1986): x-xi. W. Sturtevant,

 General Editor. Washington, D. C.: Smithsonian Institution.
- Linguistic Editor] <u>Great Basin</u>. Editor, Warren L. d'Azevedo.

 Handbook of North American Indians 11 (1986). W. Sturtevant, General Editor. Washington, D. C.: Smithsonian Institution.
- Gordon, Kathleen D. "Man the Scavenger." Anthro-Notes 7 (1985): 1-14.
- . "Dental Microwear Analysis to Detect Human Diet." American Journal of Physical Anthropology 69 (1986): 206-207.
- Griffin, James D. "Changing Concepts of the Prehistoric Mississippian Cultures of the Eastern United States. In Alabama and the Borderlands: from Prehistory to Statehood. Edited by R. Reid Badger and Lawrence A. Clayton. (1985): 4-63. University, Alabama: University of Alabama Press.
- . "An Individual's Participation in American Archaeology, 1928-1985." In Annual Review of Anthropology. Edited by Bernard J. Siegel, Alan R. Beals, and Stephen A. Tyler. (1985): 1-23. Palo Alto: Annual Reviews, Inc.
 - . "Epilogue: Joffre Lanning Coe: The Quiet Giant of Southeastern Archaeology." In Structure and Process in Southeastern Archaeology. Edited by Roy S. Dickens, Jr., and H. Trawick Ward. (1985): 287-304. University, Alabama: University of Alabama Press.
 - . "Perspectives on Gulf Coast Cultural History: A Round Table

 Discussion." In Perspectives on Gulf Coast Prehistory. Edited by Dave D.

 Davis. (1985): 315-332. Gainesville: University Presses of Florida.
- . "The Contributions of Moreau S. Maxwell to Midwestern Prehistory." In Arctic Anthropology 22 (2)(1985): 111-113. Edited by George Sabo, III. Madison: University of Wisconsin Press.

- Houchins, Chang-su. "Preface" to Paengnyon-jon Han'guk (Korea 100 Years Ago Through Photographs). Seoul: Kat'orik ch'ulp'ansa (1986): 4-5.
- Kaeppler, Adrienne L. "Anthropology and the U. S. Exploring Expedition." In Magnificent Voyagers, The U. S. Exploring Expedition, 1838-1842. Herman J. Viola and Carolyn Margolis, Editors. (1985): 119-147. Washington, D. C.: Smithsonian Institution.
 - . "Structured Movement Systems in Tonga." In Society and the Dance: The Social Anthropology of Performance and Process. Paul Spencer, Editor. (1985): 92-118. Cambridge University Press.
- . "Movement in the Performing Arts of the Pacific Islands." In Theatrical Movement: A Bibliographical Anthology. Bob Fleshman, Editor. (1986): 586-600. Scarecrow Press.
- Kaeppler, Adrienne, and Stillman, Amy Ku'uleialoha. <u>Pacific Island and Australian Aboriginal Artifacts in Public Collections in the United States of America and Canada</u>. (1985): 346 pages. Paris: UNESCO.
- Karp, Ivan. "Anthropology and Semiotics." In International Encyclopedic Dictionary of Semiotics. (1986). The Hague: Mouton and Cie.
- . "African Systems of Thought." In Africa, Second Edition. (1986): 199-212. Bloomington: Indiana University Press.
- Kaupp, P. Ann. Anthro-Notes 7 (3)(1985); 8 (1)(1985); 8 (2)(1985). National Museum of Natural History Newsletter for Teachers.
- . "Something for the Palate." Anthro-Notes 8 (1)(1986): 8-13.
- . "A Natural Way to Learn." Anthro-Notes 8 (2)(1986): 13-15.

 Klein, T. L., and Schmidt, R. G. "Geology of the Pilot Mountain-Fox Mountain Alteration System." In Volcanic-Hosted Gold and High-Alumina Rocks of the Carolina Slate Belt. P. G. Feiss, Editor. (1985): 74-107. Guidebook
- for Society of Economic Geologists Field Trip.

 Kornfeld, Marcel, and Frison, George C. "McKean Site: A 1983 Preliminary

 Analysis." Occasional Papers in Wyoming Archaeology 4 (1985): 31-44.
- Analysis." Occasional Papers in Wyoming Archaeology 4 (1985): 31-44.
 Krakker, James J. "Investigation of a Small Late Prehistoric Site in St. Clair County, Michigan." The Michigan Archaeologist 30 (3)(1984): 86-123.
- Meggers, Betty J. "Advances in Brazilian Archeology, 1935-1985." American Antiquity 50 (1985): 364-373.
- . "Archaeology: South America." Handbook of Latin American Studies. (45)(1985): 63-93. Austin: University of Texas Press.
- . "O uso da seriacao para inferir comportamento locacional." In A

 Utilizacao de Sequencias Ceramicas Seriadas para Inferir Comportamento

 Social. Betty J. Meggers and Clifford Evans, pp. 31-48. Boletim Serie

 Ensaios 3. Instituto de Arqueologia Brasileira, Rio de Janeiro. 48 pp.

 (1985).
- . "Aboriginal Adaptation to Amazonia." In Amazonia. Edited by Ghillean T. Prance and Thomas E. Lovejoy. (1985): 307-327. Oxford: Pergamon Press.
- . "El significado de la difusion como factor de evolucion." Revista Chungara (14)(1986): 81-90.
- . "El uso de secuencias ceramicas seriadas para inferir conducta social."

 Actas del Primer Simposio de la Fundacion de Arqueologic del Caribe.

 (1986): 11-32. Caracas.
- Meggers, Betty J., and Evans, Clifford. A utilização de sequencias ceramicas seriadas para inferir comportamento social. Boletim Serie Ensaios 3. Instituto de Arquelogia Brasileira, Rio de Janeiro. 48 pp. (1985).

- Milanich, Jerald T. (Editor). The Early Prehistoric Southeast: A Sourcebook. (1985). New York: Garland Publishing Corp.
 - "Discussion and Comments." In Archaeology of Northwest Florida and Adjacent Borderlands: Current Research Problems and Approaches. N. M. White, Editor. (1985). Florida Anthropological Society Publications 11.
 - "Field Schools, Fort Center, and the Origins of the Armadillo Roast--Reminiscences of Charles Fairbanks During the Florida Years, 1964-75." In Indians, Colonists, and Slaves--Essays in Memory of Charles H. Fairbanks. K. Johnson, J. Leader, and R. Wilson, Editors. (1985). Florida Journal of Anthropology, Special Publication 4.
 - "Comments" published with "Mississippi Period Archaeology of the Georgia Coastal Zone," by Morgan R. Crook, Jr. (1986). University of Georgia Archaeology Series Report 23.
- . "Weeden Island Culture and the McKeithen Site. (1986) Weston, Ct.: Pictures of Record. Inc.
- Milanich, Jerald T., and Ruhl, Donna L. Fort Center and the Belle Glade Culture, Florida. (1986). Weston, Ct.: Pictures of Records, Inc.
- Mintz, Sidney. "Epilogue: The Divided Aftermaths of Freedom." In Between Slavery and Free Labor. Moreno Fraginals, F. Moya Pons, and S. L. Engerman, Editors. (1985): 270-78.
- "Caribbean Contours." (Editor with S. Price). (1985): 254 pages. Baltimore: Johns Hopkins University Press.
- . "From Plantations to Peasantries in the Caribbean." In Caribbean Countours. Edited by S. Mintz and S. Price. (1985): 127-53.
 - . Sweetness and Power: The Place of Sugar in Modern History. (1986): 288 pages. New York: Viking-Penguin.
- . History, Evolution and the Concept of Culture: The Collected Papers of Alexander Lesser. (1986). New York: Cambridge University Press.
- . "A antropologia da producao de plantation." In Economia e movimentos sociais na America Latina. Edited by F. Henrique Cardoso, B. Sorji, and M. Font. (1986): 145-55.
- . "Die Zeit, der Zucker und das Susze. Zu Geschichte, Okonomie und
- Bedeutung des suszen Geschmacks." <u>SOWI 14</u> (H.2). (1986): 85-95. Parks, Douglas R., and Wedel, Waldo R. "Pawnee Geography: Historical and Sacred." In Great Plains Quarterly 5 (1985): 143-176.
- Potts, Richard. "Temporal span of Bone Accumulations at Olduvai Gorge, Tanzania, and Implications for Early Hominid Foraging Behavior." Paleobiology. (1986).
- . "From Hominid Origins to Complex Societies: The Distinguished Career of J. Desmond Clark." Journal of Human Evolution. (1986).
- . "Paleoanthropological Reconstructions of Early Hominid Socioecology: A Critique of Primate Models." In Adaptive Models for Human Evolution. Edited by W. Kinzey. (1986). New York: SUNY Press.
- Powell, Mary Lucas. "Late Prehistoric Community Health in the Central Deep South: Biological and Social Dimensions of the Mississippian Chiefdom at Moundville, Alabama." In Skeletal Analysis in Southeastern Archaeology. Edited by J. E. Levy. (1986). Raleigh: North Carolina Archaeological Council Publication Series.
- . "Bone Lesions of Chronic Disease: A Cautionary Note for Interpretation." American Journal of Physical Anthropology 69 (1986): 252.

- Rowley, Susan. "Population Movement in the Canadian Arctic." Etudes/Inuit Studies. 9 (1)(1985): 3-22.
 - . "Eenoolooapik." Arctic 39 (2)(1986): 182-3.
- Rudan, Pavao; Angel, J. L.; and Bennett, L. A. "Biological and Cultural Microdifferentiation Among Rural Populations in Yugoslavia." (1985). Progress Report for 1983. Zagreb and Washington, D.C.
- Schmidt, Robert G. "Snow Camp Pyrophyllite Mine." In Volcanic-Hosted Gold and High-Alumina Rocks of the Carolina Slate Belt. Edited by P. G. Feiss. Guidebook for Society of Economic Geologists Field Trip (1985): 37-47.
- Schmidt, R. G. and Klein, T. L. "High-Alumina Hydrothermal Alteration Systems and Their Role in Mineral Exploration, South-Eastern United States." In USGS Research on Mineral Resources 1985, Program and Abstracts. Edited by Kathleen Krafft. (1985): 47-48. U. S. Geological Survey Circular 949.
- Selig, Ruth O. (Consulting Editor). "Eskimos." Cobblestone. (November 1985).
- Selig, Ruth O.; Kaupp, Ann; Brooks, Alison; Lanouette, JoAnne. Anthro-Notes,

 Museum of Natural History Newsletter for Teachers. (1985-1986). 7 (3); 8

 (1); 8 (2)
- Smith, Bruce D. "Chenopodium berlandieri subsp. jonesianum: Evidence for a Hopewellian Domesticate from Ash Cave, Ohio." Southeastern Archaeology 4 (1985): 107-133.
- . "The Archaeology of the Southeastern United States: From Dalton to Desoto (10,500 B.P. 500 B.P.)." In Advances in World Archaeology Volume 5. Edited by Fred Wendorf and Angela E. Close. (1986): 1-92. Orlando: Academic Press.
- . "Paleoindian and Early Archaic Subsistence Strategies in Eastern North America." (Junior author with David Meltzer) In Foraging, Collecting, and Harvesting: Archaic Period Subsistence and Settlement in the Eastern Woodlands. Edited by Sarah W. Neusius. (1986): 1-30. Center for Archaeological Investigations Occasional Paper 6.
- . "Middle Mississippi Exploitation of Animal Populations: A Predictive Model." Chapter 23 In <u>The Late Prehistoric Southeast</u>. Edited by Chester B. DePratter. (1986). New York: Garland Publishing. (Reprint of article appearing in 1974 in <u>American Antiquity</u> 38: 274-291)
- Stanford, Dennis J., and Graham, R. "Archeological Investigations of the Selley & Dutton Mammoth Kill Sites, Yuma, Colorado." National Geographic Society Research Reports 19 (1985): 519-543.
- Sturtevant, William C. "The Meanings of Native American Art." In The Arts of the North American Indian. Edited by E. L. Wade. (1986): 23-44. New York: Hudson Hills Press; and Tulsa: Philbrook Art Center.
- _____. "Contemporary North American Indian Crafts." In 1986 Festival of American Folklife. Edited by T. Vennum, Jr. (1986): 79-82. Washington, D. C.: Smithsonian Institution Press.
- . "Great Basin." <u>Handbook of North American Indians</u>, Volume 11. W. C. Sturtevant, General Editor. (Warren d'Azevedo, Volume Editor). (1986) Washington, D. C.: Smithsonian Institution Press.
- Sturtevant, William C., and Shimony, Annemarie. (Translators). "The Origin of The Mask Complex in the Eastern Woodlands of North America," by Rolf Krusche. Man in the Northeast 31 (1986): 1-47.
- Taylor, Paul Michael. International Directory of Indonesianists. (1986). Ann Arbor: The Association for Asian Studies, Indonesian Studies Committee.

- Taylor, P. M., and Tuchrello, W. "A Bibliographic Note on Rare and Recently, Locally, or Ephemerally Published Monographs and Government Reports on the Moluccas (Maluku Province, Indonesia) Assembled by Paul Taylor; Presented as a Supplement to Existing Bibliographies." Southeast Asian Research Materials Group Newsletter 29 (1985): 9-15.
- Trousdale, William, (Editor). War in Afghanistan, 1879-80. The Personal Diary of Major General Sir Charles Metcalfe MacGregor. (1986): x-266. Detroit: Wayne State University Press.
- Ubelaker, Douglas H. "Estimation of Age at Death from Histology of Human Bone."

 Chapter 7 In Dating and Age Determination of Biological Materials. Michael R. Zimmerman and J. Lawrence Angel, Editors. (1986): 240-247. London: Croom Helm.
- Ubelaker, Douglas H., and Jantz, Richard L. "Biological History of the Aboriginal Population of North America." Lieferung 11: Amerika I: Nordamerika, Mexico. Rassengeschichte der Menschheit, Ilse Schwisetzky, editor. Oldenbourg, Munchen. (1985): 79 pages, 6 plates.

Department of Botany

- Arnold, K. E., and Littler, M. M. "The Carbon-14 Method for Measuring Primary Productivity." In Handbook of Phycological Methods. Ecological Field Methods: Macroalgae (1985): 377-396. Edited by M. M. Littler and D. S. Littler. Cambridge: Cambridge University Press.
- Banerjee, S.; Jakupovic, J.; Bohlmann, F.; King, R. M.; and Robinson, H. "Chromenes from Ageratina riparia." Phytochemistry 24 (11) (1985): 2681-2683.
- Baruah, R. N.; Zdero, C.; Bohlmann, F.; King, R. M.; and Robinson, H. "Some Sesqui- and Diterpenes from the Tribe Eupatoriaeae." <u>Phytochemistry</u> 24 (11) (1985): 2641-2644.
- Boeker, R.; Jakupovic, J.; Bohlmann, F.; King, R. M.; and Robinson, H. "Further Heliangolides and Guaianolides from <u>Eupatorium altissimum</u>." Phytochemistry 25 (7) (1986): 1669-1672.
- Bohlmann, F.; Baruah, R. N.; King, R. M.; and Robinson, H. "Alicyclic Diterpenes from Cronquistianthus bishopii." Planta Medica (1985): 167.
- Bohlmann, F.; Misra, L. N.; Jakupovic, J.; King, R. M.; and Robinson, H.
 "Guaianolides, Heliangolides, Diterpenes and Cycloartenol Derivatives from
 Balsamorhiza sagittate." Phytochemistry 24 (9) (1985): 2029-2036.
- Bohlmann, F.; Zdero, C.; King, R. M.; and Robinson, H. "Further Germacranolides from Eupatorium serotinum." Planta Medica (1985): 76.
- Bohlmann, F.; Zdero, C.; Jakupovic, J.; Grenz, M.; Castro, V.; King, R. M.; Robinson, H.; and Vincent, L. P. D. "Further Pyrrolizidine Alkaloides and Furoeremophilanes from <u>Senecio</u> Species." <u>Phytochemistry</u> 25 (5) (1986): 1151-1159.
- Bohlmann, F.; Zdero, C.; Schmeda-Hirschmann, G.; Jakupovic, J.; Dominguez, X. A.; King, R. M.; and Robinson, H. "Dimeric Guaianolides and Other Constituents from Gochnatia Species." Phytochemistry 25 (5) (1986): 1175-1178.
- Burns-Balogh, P., and Robinson, H. "Orchid Pollen/Pollinaria: A Collection of 3,100 Scanning Electron Micrographs." IDC, K-13, 261/1.

- Cuatrecasas, J. "Studies in Neotropical Senecioneae IV. New Taxa in Senecio and Cabreriella." Proceedings of the Biological Society of Washington 98 (3) (1985): 623-626.
- . "Miscelanea Sobre Flora Neotropica, IV. Addenda." <u>Fontqueria</u> 9 (1986): 5-7.
- . "Un Genero Nuevo de Astereae, Compositae, de Colombia." <u>Anales Jardin</u> Botanico Madrid 42 (2) (1986): 415-426.
- DeFilipps, Robert. "Bernardo de Iriarte, of the Palm Genus Iriartea." Principes 29 (1985): 156-159.
- Eyde, Richard H. "Letter from the Smithsonian" [on the Wilkes Expedition].

 Douglasia 9 (3) (1985): 7-8.
 - "A Rich to Remember." Rich Family Association Kinfolk 22 (2) (1985):
 - . "Expedition Botany, the Making of New Profession." In <u>Magnificent</u>

 <u>Voyagers: the U.S. Exploring Expedition, 1838-42</u> (1985): 25-41. Edited by

 H. J. Viola and C. Margolis. Washington: Smithsonian Institution Press.
 - . "The Case for Monkey-Mediated Evolution in Big-Bracted Dogwoods."
 Arnoldia 45 (4) (1985): 2-9.
 - . [Japanese version translated and introduced by H. Hatta.] In Collecting and Breeding 48 (1986): 76-79.
- . [Chinese translation by S.-Y. Wang.] In Zhiwu Zazhi 1986 (no. 1): 9-10, 32.
- . "William Rich of the Great U.S. Exploring Expedition and How His Shortcomings Helped Botany Become a Calling." Huntia 6 (2) (1986).
- Farr, Ellen R. "Index Nominum Genericorum Supplements." <u>Taxon</u> 35 (3) (1986): 546.
- . "(92) Proposal to Amend Art. 9.3." Taxon 35 (2) (1986): 396-397.

 Farr, Ellen R.; Leussink, A.; and Zijlstra, G. eds. "Index Nominum Genericorum (Plantarum) Supplementum I." Regnum Vegetabile 113 (1986): 1-126.
- Fosberg, F. R. "Coral Reef Destruction in Ryukyu Islands." Environmental Conservation 12 (1985): 270.
- Fosberg, F. R., and Sachet, M-H. "Santalum in Eastern Polynesia." Candollia 40 (1985): 459-470.
- . "A New Pavonia from Ceylon." Ceylon Journal Science 15 (1982) (1985): 38-40.
- Hale, Mason E., Jr. "Zanthomaculina Hale, a New Lichen Genus in the Parmeliaceae (Ascomycotina)." Lichenologist 17 (3) (1985): 255-265.
- . "New Species in the Lichen Family Parmeliaceae (Ascomycotina)."
 Mycotaxon 25 (1) (1986): 85-93.
- . "Arctoparmelia, a New Genus in the Parmeliaceae (Ascomycotina)."

 Mycotaxon 25 (1) (1986): 251-254.
- . "Flavoparmelia, a New Genus in the Lichen Family Parmeliaceae (Ascomycotina)." Mycotaxon 25 (2) (1986): 603-605.
- . "Appendix: Lichenes (Lichens)." In Marine Fauna and Flora of Bermuda (1986): 22-25. New York: John Wiley & Sons. Edited by Wolfgang Sterrer.
- Hale, Mason E., Jr., and Teuvo Ahti. "An Earlier Name for Parmotrema perlatum" (Huds.) Choisy (Ascomycotina: Parmeliaceae)." Taxon 35 (1) (1986): 133-134.
- Jakupovic, J.; Baruah, R. N.; Bohlmann, F.; King, R. M.; and Robinson, H. "New Alicyclic Diterpenes and Ent-Labdanes from <u>Gutierrezia solbrigii</u>."

 <u>Tetrahedron</u> 41 (1985): 4537-4544.

- Jakupovic, J.; Baruah, R. N.; Zdero, C.; Eid, F.; Pathak, V. P.; Chau-Thi, T.
 V.; Bohlmann, F.; King, R. M.; and Robinson, H. "Further Diterpenes from
 Plants of the Compositae, Subtribe Solidagininae." Phytochemistry 25 (8)
 (1986): 1873-1881.
- Jakupovic, J.; Ellmauerer, E.; Bohlmann, F.; King, R. M.; and Robinson, H.

 "Ent-labdanes from Austrobrickellia patens." Phytochemistry 25 (8) (1986): 1927-1929.
- King, R. M., and Robinson, H. "Studies in the Eupatorieae (Asteraceae). CCXXI.

 Additional Species from Tropical America." Phytologia 58 (4) (1985):
 258-272.
- Lellinger, David B. A Field Manual of the Ferns and Fern-Allies of the United States and Canada (1985). Washington: Smithsonian Institution Press.
- Littler, M. M. "Introduction." In Herbivore-Plant Interactions on Coral Reefs:
 Proceedings 5th International Coral Reef Congress, Tahiti, 1985, Vol. 4.
 Edited by J. C. Ogden, and M. M. Littler.
- Littler, M. M., and Littler, D. S. "Factors Controlling Relative Dominance of Primary Producers on Biotic Reefs." In <u>Herbivore-Plant Interactions on Coral Reefs: Proceedings 5th International Coral Reef Congress, Tahiti, 1985, Vol. 4: 35-39. Edited by J. C. Ogden, and M. M. Littler.</u>
- . "Non-Destructive Sampling." In Handbook of Phycological Methods.

 Ecological Field Methods: Macroalgae (1985): 161-175. Cambridge:
 Cambridge University Press.
- Littler, M. M., and Littler, D. S. eds. <u>Handbook of Phycological Methods</u>.

 <u>Ecological Field Methods: Macroalgae</u> (1985). Cambridge: Cambridge
 University Press.
- Littler, M. M.; Taylor, P. R.; and Littler, D. S. "Plant Defense Associations in the Marine Environment." <u>Coral Reefs</u> 5 (1986): 1-9.
- Nicolson, Dan H. "Apologia." Taxon 34 (1985): 345.
- . "Species Epithets and Gender Information." Taxon 35 (1986): 323-328. Nicolson, Dan H., and Panigrahi, G. "Proposals to Amend Art. 6.4." Taxon 34 (1985): 719-720.
- Nicolson, Dan H., Suresh, C. R. "(809) Proposal to Add <u>Heydia</u> as a Nom. Rej. Under 2103 <u>Scleropyrum</u>, Nom. Cons. (Santalaceae)." <u>Taxon</u> 35 (1986): 177-178.
- . "(810) Proposal to Conserve 2577 <u>Tiliacora</u> Colebr. Against Braunea Willd. (Menispermaceae)." <u>Taxon</u> 35 (1986): 178-179.
- . "(811) Proposal to Conserve 2593 Tinospora Against Campylus (Menispermaceae)." Taxon 35 (1986): 179-180.
- . "(813) Proposal to Conserve 4662 Salacia Against Courondi (Hippocrateaceae)." Taxon 35 (1986): 181-182.
- . "(824) Proposal to Reject Nialel Adanson Under 4189 Aglaia Lour., Nom. Cons. (Meliaceae)." Taxon 35 (1986): 388.
- . "(795) Proposal to Conserve 5793 <u>Ludwigia</u> (Onagraceae)." <u>Taxon</u> 34 (1985): 537-538.
- _____. "(804) Proposal to Conserve 4087 Glycosmis Against Panel (Rutaceae)."
 Taxon 34 (1985): 715-716.
- . "(841) Proposal to Conserve 8352a Canthium Lam. (Rubiaceae)." Taxon 35 (1986): 607.
- Nowicke, Joan W.; Bittner, Janice L.; and Skvarla, John J. "Paeonia, Exine Substructure and Plasma Ashing." In Pollen and Spores: Form and Function (1986): 81-95. Edited by I. K. Ferguson and S. Blackmer. London: Academic Press.

- Quero, H. J., and Read, R. W. "A Revision of the Palm Genus Gaussia."

 Systematic Botany 11 (1) (1986): 145-154, figs. 123.
- Ramamoorthy, T. P., and Wasshausen, Dieter C. "A New Name in Dyschoriste (Acanthaceae)." Brittonia 37 (4) (1986): 358-359.
- Read, R. W. "The Genus <u>Nageliella</u>." <u>American Orchid Society Bulletin</u> 55 (3) (1986): 252-254.
- . "Icones Bromeliacearum I." <u>Journal of the Bromeliad Society</u> 36 (3) (1986): 119-124, figs. 7-9.
- . "Icones Bromeliacearum II." <u>Journal of the Bromeliad Society</u> 36 (4) (1986): 152-153, fig. 5.
- Read, R. W., and Solt, M. L. "Bibliography of the Living Cycads (Annotated)."
 Lyonia 2 (4): 34-199, figs. 1-3 and fronticepiece.
- Read, R. W., and Bonsack, C. "Icones Bromeliacearum III." Journal of the Bromeliad Society 36 (5) (1986): 200-201, fig. 4.
- Robinson, H. "The Structure and Significance of the Leucobryaceous Leaf."

 Monographs in Systematic Botany from the Missouri Botanical Garden 11

 (1985): 111-120.
- . "Comments on the Cladistic Approach to the Phylogeny of the Bryophytes' by Mischler and Churchill." Brittonia 37 (3) (1985): 279-281.
- . "Studies in the Heliantheae (Asteraceae). XXXXI. A New Species of Aspilia from Brazil." Phytologia 58 (4) (1985): 245-247.
- . "On the Relationships of the Hookeriaceae." The Bryological Times 35 (1986): 2-3.
- . "Notes on the Bryogeography of Venezuela." The Bryologist 89: 8-12.

 Robinson, H. and Kahn, B. "A New Species of Stifftia from Cayenne (Asteraceae: Mutisieae)." Phytologia 58 (4) (1985): 248-251.
- . "New Species of <u>Vernonia</u> from Bolivia and Peru (Vernonieae: Asteraceae)." Phytologia 58 (4) (1985): 252-257.
- Robinson, H.; Powell, A. M.; King, R. M.; and Weedin, J. F. "Chromosome Numbers in Compositae, XV: Liabeae." Annals of the Missouri Botanical Garden 72 (1985): 469-479.
- Scora, R. W., and Nicolson, Dan H. "The correct Name for the Shaddock, Citrus maxima, not C. grandis (Rutaceae)." Taxon 35 (1986): 592-595.
- Singh, P.; Jakupovic, J.; Bohlmann, F.; King, R. M.; and Robinson, H. "Highly Oxygenated Guaianolides from Bishopanthus soliceps." Phytochemistry 24 (9) (1985): 2110-2112.
- Skog, L. E. "Gesneriaceae Chromosome Numbers VIII. Recent Additions." Crosswords 9 (3) (1985): 4-5.
- Skog, L. E. ed. "Flora of the Guianas Report No. 1." <u>Taxon</u> 35 (2) (1986): 413-415.
- Smith, Alan R., and Lellinger, David B. "New Tropical American Species of Thelypteris (Pteridophyta)." Proceedings of the Biological Society of Washington 98 (1986): 916-930.
- Smith, L. B. "Morren's Paintings." <u>Journal of the Bromeliad Society</u> 36 (8) (1986): 8 (fig. 3).
- Smith, L. B., and Read, R. W. "A Mimic Bromeliad from Colombia." Journal of the Bromeliad Society 35 (6) (1985): 251 (fig. 6).
- . "A Weird Bromeliad from the Lost World." Journal of the Bromeliad Society 35 (1) (1986): 10 (fig. 4).

- Smith, L. B., and Schubert, B. G. "A New Cane Begonia From Amazonian Brazil."
 The Begonian 52 (6) (1985): 135.
- Smith, Lyman B.; Wasshausen, Dieter C.; Golding, Jack; and Karegeannes, Carrie E. "Begoniaceae Part I: Illustrated Key Part II: Annotated Species List." Smithsonian Contributions to Botany 60 (1986). Washington, D.C.: Smithsonian Institution Press.
- Suresh, C. R., and Nicolson, Dan H. "Two Nomenclatural Novelties Based on Rheede's Hortus Malabaricus." Taxon 35 (1986): 354-355.
- Taylor, P. R.; Littler, M. M.; and Littler, D. S. "Escapes from Herbivory in Relation to the Structure of Mangrove Island Macroalgal Communities."

 Oecologia 69 (1986): 481-491.
- Terrell, E. E.; Lewis, W. H.; Robinson, H.; and Nowicke, J. W. "Phylogenetic Implications of Diverse Seed Types, Chromosome Numbers, and Pollen Morphology in <u>Houstonia</u> (Rubiaceae)." <u>American Journal of Botany</u> 73 (1): 103-115.
- Villa-Lobos, Jane. "Costa Rican Corridor." Threatened Plants Newsletter 15 (1985): 16.
- . "Atlantic Forest Protected." Threatened Plants Newsletter 15 (1985): 16-17.
- . "Desert Oasis Saved." Threatened Plants Newsletter 15 (1985): 17-18.

 "The Endangered Morro Bay Kangaroo Rat." Biological Conservation
- Newsletter 39 (1986): 1.

 "Los Amigos del Manu." Biological Conservation Newsletter 40 (1986)
- . "Los Amigos del Manu." <u>Biological Conservation Newsletter</u> 40 (1986): 1-2.
- Wasshausen, Dieter C. "The Systematics of the Genus Pachystachys (Acanthaceae)." Proceedings of the Biological Society of Washington 99 (1) (1986): 160-185.
- Wurdack, J. J. "Atlas of Hairs for Neotropical Melastomataceae." <u>Smithsonian</u>
 <u>Contributions to Botany</u> 63 (1986). Washington, D. C.: Smithsonian
 <u>Institution Press.</u>
- Zanoni, T. A., and Read, R. W. "Hybrid in <u>Chrysalidocarpus." Principes</u> 30 (1) (1986): 35-37 (figs. 1-4).
- Zdero, C.; Bohlmann, F.; King, R. M.; and Robinson, H. "Further 5-Methyl Coumarins and other Constituents from the Subtribe Mutisiinae." Phytochemistry 25 (2) (1985): 509-516.

Department of Entomology

- Burns, John M. "Wallengrenia otho and W. egeremet in Eastern North America (Lepidoptera: Hesperiidae: Hesperiinae)." Smithsonian Contributions to Zoology 423 (1985): 1-39, 66 figures.
- Clarke, J. F. Gates. "Pyralidae and Microlepidoptera of the Marquesas Archipelago." Smithsonian Contributions to Zoology 416 (1986): 1-485, 319 figs., maps, 1 chart.
- Coddington, J. A. "The Genera of the Spider Family Theridiosomatidae."

 Smithsonian Contributions to Zoology 422 (1986): 1-96, 220 figures.
- . "Orb Webs in 'Non-orb Weaving' Ogre Faced Spiders (Araneae: Dinopidae):
 A Question of Genealogy." Journal of Cladistics, 2 (1986): 53-67.

- Davis, D. R. "Neotropical Tineidae, I: The Types of H.B. Moschler (Lepidoptera: Tineoidea)." Proceedings of the Entomological Society of Washington 88 (1)(1986): 83-92.
- . "A Search for the Type Series of Nematocentropus omeiensis Huang (Lepidoptera: Neopseustidae)." Proceedings of the Entomological Society of Washington 88(2) (1986): 391-392.
- . "Donation of Blanchard Lepidoptera Collection to the Smithsonian Institution." Journal of the Lepidopterists' Society 39 (3)(1985): 235-236.
- . "A New Family of Monotrysian Moths From Austral South America (Lepidoptera: Palaephatidae), with a Phylogenetic Review of the Monotrysia." Smithsonian Contributions to Zoology 434 (1986): 1-202, 599 figures.
- Davis, D. R.; Clayton, D. H.; Janzen, D. H.; and Brooke, A. P. "Neotropical Tineidae, II: Biological Notes and Descriptions of Two New Moths Phoretic on Spiny Pocket Mice in Costa Rica (Lepidoptera: Tineoidea)." Proceedings of the Entomological Society of Washington 88 (1)(1986): 98-109.
- Davis, D. R., and Faeth, S. H. "A New Oak-mining Eriocraniid Moth from Southeastern United States (Lepidoptera: Eriocranidiae)." Proceedings of the Entomological Society of Washington 88 (1)(1986): 145-153.
- Erwin, Terry L. "Tambopata Reserved Zone, Madre de Dios, Peru: History and Description of the Reserve." Revista Peruana de Entomololia 27 (1985): 1-8.
- . "The Taxon Pulse: A General Pattern of Lineage Radiation and Extinction Among Carabid Beetles." In Taxonomy, Phylogeny, and Zoogeography of Beetles and Ants: A Volume Dedicated to the Memory of Philip Jackson Darlington Jr. 1904-1985. Edited by G. E. Ball. (1985): 437-472. Dr. W. Junk b. v. Publishers. The Hague.
- "Agra, Arboreal Beetles of Neotropical Forests: mixta-group, virgata-group, and ohausi-group Systematics (Carabidae)." Systematic Entomology, 11 (1986): 293-316.
- Erwin, Terry L., and Stork, Nigel. "The Hiletini, an Ancient and Enigmatic Tribe of Carabidae with a Pantropical Distribution (Coleoptera)."

 Systematic Entomology 10 (1985): 405-451.
- Flint, Oliver S., Jr., and Angrisano, Elisa B. "Studies of Neotropical Caddisflies XXXV: The Immature Stages of Banyallarga argentinica Flint (Trichoptera: Calamoceratidae)." Proceedings of the Biological Society of Washington 98 (1985): 687-697.
- Froeschner, R. C. "Restoration of the Species Name <u>Salda coriacea</u> Uhler, 1872 (Hemiptera: Saldidae)." <u>Proceedings of the Entomological Society of Washington</u> 88 (1986): 394.
- Hevel, G. F. "Leafhoppers." In The World and I 6 (1986): 266-267. Washington, D. C.: The Washington Times Corporation.
- Hoogstraal, H.; Wassef, H. Y.; Hayes, C.; and Keirans, James E. "Ornithodoros (Alectorobius) spheniscus n. sp. [Acarina: Ixodoidea: Argasidae: Ornithodoros (Alectorobius) capensis group], a Tick Parasite of the Humboldt Penguin in Peru." Journal of Parasitology 71 (5)(1985): 635-644.
- Huang, Yiau-Min. "Aedes (Stegomyia) bromeliae: Diptera: Culicidae, the Yellow Fever Virus Vector in East Africa." Medical Entomology 23 (2)(1986): 196-200.

Keirans, James E. "Amblyomma antillorum Kohls, 1969 (Acari: Ixodidae):

Description of the Immature Stages from the Rock Iguana, Iguana pinguis
(Sauria: Iguanidae) in the British Virgin Islands." Proceedings of the
Entomological Society of Washington 87 (4)(1985): 821-825.

. "Harry Hoogstraal (1917-1986)." Journal of Medical Entomology 23 (4)(1986): 342-343.

- . Book Review. The Ticks of California (Acari: Ixodida) by D. P. Furman and E. C. Loomis. Journal of Medical Entomology 22 (6)(1985): 6-7.
- Keirans, James E.; Clifford, C. M.; Guglielmone, A. A.; and Mangold, A. J.
 "Ixodes (Ixodes) pararicinus n. sp. (Acari: Ixodoidea: Ixodidae), a South
 American Cattle Tick Long Confused with Ixodes ricinus." Journal of
 Medical Entomology 22 (4)(1985): 401-407.
- Keirans, James E., and Degenhardt, W. G. "Aponomma elaphense Price 1959 (Acari: Ixodidae): Diagnosis of the Adults and Nymph with First Description of the Larvae." Proceedings of the Biological Society of Washington 98 (3)(1985): 711-717.
- Krombein, Karl V. "A Remarkable New African Amisegine Wasp (Hymenoptera: Chrysididae: Amiseginae)." Proceedings of the Entomological Society of Washington 88 (1986): 509-514, 3 figures.
- Krombein, Karl V., and Pulawski, Wojciech J. "Biosystematic Studies of Ceylonese Wasps, XVI: A Revision of <u>Gastrosericus</u> Spinola (Hymenoptera: Larridae)." <u>Smithsonian Contributions to Zoology</u> 436 (1986): 1-20, 34 figures.
- Larcher, Scott F., and Wise, D. H. "Experimental Studies of the Interactions Between a Web-invading Spider and Two Host Species. <u>Journal of</u>
 Arachnology 13 (1)(1985): 43-59.
- Lindroth, C. H.; Bangsholt, F.; Baranowski, R.; Erwin, T. L.; Jorum, P.; Landon, B. O.; Refseth, D.; and Silfverberg, H. The Carabidae (Coleoptera) of Fennoscandia and Denmark. Copenhagen: E. J. Brill Publishers. 225 pp.
- Mathis, Wayne N. "A Revision of the Subgenus Eremotrichoma Soika of the Shore Fly Genus Allotrichoma Becker (Diptera: Ephydridae)." Israel Journal of Entomology 19 (1986): 127-139.
- . "A Revision of the Shore Fly Genus <u>Placopsidella</u> Becker (Diptera: Ephydridae)." <u>Smithsonian Contributions to Zoology</u> 430 (1986): 1-30, 34 figures.
- Mathis, Wayne N., and Hogue, Charles L. "Description of a New Species of the Shore Fly Genus <u>Diedrops</u> (Diptera: Ephydridae) from Colombia." <u>Contributions in Science</u> 379 (1986): 21-26.
- Mathis, Wayne N., and Steiner, Warren E. "An Adventive Species of Brachydeutera Loew in North America (Diptera: Ephydridae)." Journal of the New York Entomological Society 94 (1)(1986): 56-61.
- McGinley, R. J. "Studies of Halictinae (Apoidea: Halictidae), I: Revision of New World Lasinglossum Curtis." Smithsonian Contributions to Zoology 429 (1986): 1-294, 746 figures.
- . "MELISSA Melittologist's Directory" 1 (supplement) (1986), 45 pages.

 McGinley, R. J. and Michener, C. D. "MELISSA The Melittologist's Newsletter" 1

 (1986), 49 pages.
- Robbins, Robert K. "Independent Evolution of 'False Head' Behavior in Riodinidae." Journal of the Lepidopterists' Society 39 (1986): 224-225.

- Spangler, Paul J. "The Status of the Riffle Beetle Genus <u>Lara</u> LeConte and Homonymy of the Subfamily Group Name Larinae (Coleoptera: Elmidae)." Entomological News 97 (2)(1986): 76-78.
- . "Two New Species of Water-striders in the Genus Oiovelia from the Tepui Cerro de la Neblina, Venezuela (Hemiptera: Veliidae)." Proceedings of the Entomological Society of Washington 88 (3)(1986): 438-450, 26 figures.
- . "A New Genus and Species of Water Scavenger Beetle, Guyanobius adocetus, from Guyana and its larva (Coleoptera: Hydrophilidae: Hydrobiinae)." Proceedings of the Entomological Society of Washington 88 (3)(1986): 585-594, 24 figures.
- . "Coleoptera." In Stygofauna Mundi, a Faunistic, Distributional, and Ecological Synthesis of the World Fauna Inhabiting Subterranean Eaters (including the Marine Interstitial). Edited by L. Botosaneanu. (1986): 622-631, 16 figures. Leiden: E. J. Brill/Dr. W. Backhuys.
- . "Three New Species of Water Scavenger Beetles of the Genus Chaetarthria from South America (Coleoptera: Hydrophilidae)." Proceedings of the Biological Society of Washington 99 (3)(1986): 509-516, 8 figures.
- Spangler, Paul J.; Froeschner, Richard C.; and Polhemus, John T. "Comments on a Water-strider, Rheumatobates meinerti Schroeder, from the Antilles and a Checklist of the Species of the Genus (Hemiptera: Gerridae)."

 Entomological News 96 (5)(1985): 196-200.
- Traub, R. "Coevolution of Fleas and Mammals." Chapter 8. In Coevolution of Parasitic Arthropods and Mammals. Edited by K. C. Kim. (1985): 295-437, 126 figs., refs. New York: John Wiley & Sons, Inc.
- Traub, R. "List of Parasitic Arthropods Associated with Mammals. Order Siphonaptera." In <u>Coevolution of Parasitic Arthropods and Mammals</u>. Edited by K. C. Kim. (1985): 690-697. New York: John Wiley & Sons, Inc.
- Traub, R., and R. Inger. "Obituary Harry Hoogstraal (1917-1986)." Field Museum of Natural History 57 (7)(1986): 9-10.

Department of Invertebrate Zoology

- Andolshek, Margaret D., and Hobbs, Horton H., Jr. "The Entocytherid Ostracod Fauna of Southeastern Georgia." Smithsonian Contributions to Zoology 424 (1986): i-iii, 1-43. Washington, D.C.: Smithsonian Institution Press.
- Barnard, J. L., and Clark, J. "A New Sea-Cave Amphipod from Bermuda (Dulichiidae)." Proceedings of the Biological Society of Washington 98 (1985): 1048-1053, 3 figs.
- Bayer, F. M. "The Invertebrates of the U.S. Exploring Expedition." In

 Magnificent Voyagers. The U.S. Exploring Expedition, 1838-1842 71-87.

 Edited by Herman J. Viola, and Carolyn Margolis. Washington, D. C.:

 Smithsonian Institution Press.
- Boss, K. J., and Harasewych, M. G. "Soviet Contributions to Malacology in 1980." The Veliger 28 (3)(1986): 329-337.

- Bowman, T. E. "Name Endings in Ostracod Superfamilies a Response to I. G. Sohn." Lethaia 18 (1985): 304.
- . "Heteromysoides dennisi, a New Mysidacean Crustacean from Cemetery Cave, Grand Bahama Island." Proceedings of the Biological Society of Washington 98 (4)(1985): 945-948.
- . "Thermosphaeroma cavicauda and T. macrura, New Sphaeromatid Isopods from Mexican Hot Springs." Proceedings of the Biological Society of Washington 98 (4)(1985): 1042-1047.
 - . "Freshwater Calanoid Copepods of the West Indies." In <u>Proceedings of the Second International Conference on Copepoda, Ottawa, Canada, 13-17 August 1984</u>. Syllogeus 58 (1986): 237-246. Edited by G. Schriever, H. K. Schminke, and C.-t Shih. Ottawa: National Museum of Natural Sciences.
 - . "Tridentella recava, a New Isopod from Tilefish Burrows in the New York Bight (Flabellifera: Tridentellidae)." Proceedings of the Biological Society of Washington 99 (2)(1986): 269-273.
 - . "Tortanus recticauda, Extension of Range to Arabian Gulf (Copepoda, Calanoida, Tortanidae)." Crustaceana 50 (3)(1986): 239-242.
 - . "Copepoda: Calanoida." In Stygofauna Mundi, a Faunistic,
 Distributional, and Ecological Synthesis of the World Fauna Inhabiting
 Subterranean Waters (Including the Marine Interstitial) (1976): 295-298.
 Edited by Lazare Botosaneanu. Leiden: E. J. Brill/Dr. W. Backhuys.
- . "Mictacea." In Stygofauna Mundi, a Faunistic, Distributional, and Ecological Synthesis of the World Fauna Inhabiting Subterranean Waters (Including the Marine Interstitial) (1976): 410-411. Edited by Lazare Botosaneanu. Leiden: E. J. Brill/Dr. W. Backhuys.
- . "Mysidacea." In Stygofauna Mundi, a Faunistic, Distributional, and Ecological Synthesis of the World Fauna Inhabiting Subterranean Waters (Including the Marine Interstitial) (1976): 405-409. Edited by Lazare Botosaneanu. Leiden: E. J. Brill/Dr. W. Backhuys.
- Bruce, A. J., and Chace, F. A., Jr. "Paralebbeus zotheculatus, n. gen., n. sp., a New Hippolytid Shrimp from the Australian Northwest Shelf." Proceedings of the Biological Society of Washington 99 (2)(1986): 237-247.
- Cairns, S. D. "Stylasteridae (Hydrozoa: Hydroida) of the Galapagos Islands."

 Smithscnian Conributions to Zoology 26 (1986): i-iii, 1-42. Washington,
 D.C.: Smithsonian Institution Press.
- . "A Revision of the Northwest Atlantic Stylasteridae." Smithsonian Contributions to Zoology 418 (1986): i-iv, 1-131. Washington, D.C.: Smithsonian Institution Press.
- Cairns, S. D.; den Hartog, J. C.; and Arneson, C. "Class Anthozoa." In <u>Marine</u>

 Fauna and Flora of Bermuda (1986): 159-194. Edited by W. Sterrer. New

 York: John Wiley & Sons, Inc.
- Chace, F. A., Jr. "The Caridean Shrimps (Crustacea: Decapoda) of the Albatross Philippine Expedition, 1907-1910, Part 4: Families Oplophoridae and Nematocarcinidae." Smithsonian Contributions to Zoology 432 (1986): i-iv, 1-82. Washington, D.C.: Smithsonian Institution Press.
- Chace, F. A., Jr.; McDermott, J. J.; McLaughlin, P. A.; and Manning, R. B.
 "Order Decapoda (Shrimps, Lobsters and Crabs)." In Marine Fauna and Flora
 of Bermuda (1985): 312-358. Edited by Wolfgang Sterrer. John Wiley &
 Sons, Inc.
- Child, C. Allan. "Spotlight on a Sea-Going "Spider." Animal Kingdom 89 (1)(1986): 36-38, 2 photos.

- Child, C. Allan, and Harbison, G. R. "A Parasitic Association between a Pycnogonid and a Scyphomedusa in Midwater." <u>Journal of the Marine</u> Biological Association of the United Kingdom 66 (1986): 113-117.
- Clark, J., and Barnard, J. L. "Tonocate, a New Genus and Species of Zobrachoidae from Argentina (Crustacea: Marine Amphipoda)." Proceedings of the Biological Society of Washington 99 (1986): 225-236, 6 figs.
- Cressey, R. F. "Biogeography of Parasitic Copepods." Proceedings of the Second International Conference on Copepoda 58 (1986): 136-142.
- Cressey, R. F., and Cressey, H. B. "Holobomolochus (Copepoda: Bomolochidae)
 Redefined, with Descriptions of Three New Species from the Eastern
 Pacific." Proceedings of the Biological Society of Washington 5 (4)(1985): 717-727.
- Emlet, R. B. "Crystal Axes in Recent and Fossil Echinoids Indicate Trophic Mode in Larval Development." Science 230: 937-940.
- . "Facultative Planktotrophy in the Tropical Echinoid <u>Clypeaster rosaceus</u>
 (Linnaeus) and a Comparison with Obligate Planktotrophy in <u>Clypeaster</u>
 subdepressus (Gray) (Clypeasteroida: Echinoidea)." <u>Journal of Experimental</u>
 Marine Biology and Ecology 95: 183-202.
- Fauchald, K.; Sturmer, W.; and Yochelson, E. L. "Sphenothallus "Vermes" in the early Devonian Hunsruck Slate, West Germany." Palaontologische Zeitschrift 60 (1-2)(1986): 57-64.
- Foell, E. J., and Pawson, D. L. "Photographs of Invertebrate Megafauna from Abyssal Depths of the North-eastern Equatorial Pacific Ocean." Ohio Journal of Science 86 (3)(1986): 61-68.
- Froglia, C., and Manning, R. B. "Notes on the Species of Allosquilla and Platysquilloides (Crustacea: Stomatopoda)." Proceedings of the Biological Society of Washington 99 (2)(1986): 261-265.
- Glynn, P. W., Peters, E. C., and Muscatine, L. "Coral Tissue Microstructure and Necrosis: Relation to Catastrophic Coral Mortality in Panama."

 Diseases of Aquatic Organisms 1 (1986): 29-37.
- Harasewych, M. G. "The Columbariinae (Gastropoda: Turbinellidae) of the Eastern Indian Ocean." Journal of the Malacological Society of Australia 8 (1&2)(1986).
- Harasewych, M. G., and Petit, R. E. "Notes on the Morphology of Admete viridula (Gastropoda: Cancellariidae)." The Nautilus 100 (3)(1986): 85-91.
- Hart, C. W. Jr.; Hayek, L. C.; Clark, J.; and Clark, W. H. "The Life and Ecology of the Entocytherid Ostracod <u>Uncinocythere occidentalis</u> (Kozloff & Whitman) in Idaho." <u>Smithsonian Contributions to Zoology</u> 419, (1985): i-iv, 1-22. Washington, D.C.: Smithsonian Institution Press.
- Hart, C. W., Jr., and Manning, R. B. "Two New Shrimps (Procarididae and Agostocarididae, New Family) from Marine Caves of the Western North Atlantic." Journal of Crustacean Biology 6 (3)(1986): 408-416.
- Hershler, R., and Longley, G. "Phreatic Hydriobiids (Gastropoda: Prosobranchia) from the Edwards (Balcones Fault Zone) Aquifer Region, South-Central Texas." Malacologia 27 (1)(1986): 127-172.
- . "Hadoceras taylori, a New Genus and Species of Phreatic Hydrobiidae (Gastropoda: Rissoacea) from South-Central Texas." Proceedings of the Biological Society of Washington 99 (1)(1986): 121-136.
- Hershler, Robert. "Systematic Revision of the Hydrobiidae (Gastropoda: Rissoacean) of the Cuatro Cienegas Basin, Coahuila, Mexico." Malacologia 26 (1-2)(1985): 31-123.

- Higgins, Robert P. "Kinorhyncha." In Marine Fauna and Flora of Bermuda 220-222. Edited by W. Sterrer and C. Sterrer. New York: Academic Press.
- "Kinorhyncha." In Stygofauna Mundi, ed. L. Botosaneau.
 "Loricifera." McGraw Yearbook of Science and Technology, (1986): 262-254. Editor S. P. Parker. New York: McGraw Hill Book Co.
- Higgins, Robert P., and Kristensen, R. M. "New Loricifera from Southeastern United States Coastal Waters." Smithsonian Contributions to Zoology 438: 1-70. Washington, D.C.: Smithsonian Institution Press.
- Hobbs, Horton H., Jr., and Robison, Henry W. "A New Burrowing Crayfish (Decapod: Cambaridae) from Southwestern Arkansas." Proceedings of the Biological Society of Washington 98 (4): 1035-1041.
- Holthuis, L. B., and Manning, R. B. "Neodorippe Serene & Romimohtarto, 1969 (Crustacea: Decapoda): Proposed Designation of a Type Species." Bulletin of Zoological Nomenclature 42 (3)(1985): 304-305.
- Hope, W. Duane, and Yorkoff, A. Book chapter. "Nematoda." In An Annotated Checklist of Marine Invertebrates in the Cold Temperate Northeast Pacific, vol. I. Edited by W. C. Austin, pp. 129-152. Victoria: Fotoprint, Ltd., 1985.
- Houbrick, R. S. "The Systematic Position of Royella sinon (Bayle) (Prosobranchia: Cerithiidae)." The Veliger 28 (4): 429-435.
- "Cerithidea reidi, spec. nov., from Western Australia." The Veliger 28(3): 280-286.
- . "Discovery of a New Living Cerithioclava Species in the Caribbean (Mollusca: Prosobranchia: Cerithiidae)." Proceedings of the Biological Society of Washington 99 (2): 257-260.
- . "Transfer of Quadrasia from the Planaxidae to the Buccinidae (Mollusca: Gastropoda: Prosobranchia)." Proceedings of the Biological Society of Washington 99 (2): 357-362.
- Jensen, R. H., and Harasewych, M. G. "Class Polyplacophora (Chitons)." In Marine Fauna and Flora of Bermuda: A Systematic Guide to the Identification of Marine Organisms. (1986): 394-397. Edited by W. Sterrer. John Wiley & Sons, Inc.
- "Class Scaphopoda (Tusk Shells)." In Marine Fauna and Flora of Bermuda: A Systematic Guide to the Identification of Marine Organisms. (1986): 458-460. Edited by W. Sterrer. John Wiley & Sons, Inc.
- "Class Bivalvia (=Pelecypoda, Lamellibranchia) (Clams, Mussels, Shipworms, etc.)." In Marine Fauna and Flora of Bermuda: A Systematic Guide to the Identification of Marine Organisms. (1986): 460-491. Edited by W. Sterrer. John Wiley & Sons, Inc.
- Jensen, R. H.; Harasewych, M. G.; and Clark, K. "Class Gastropoda (Snails. Limpets and Slugs)." In Marine Fauna and Flora of Bermuda: A Systematic Guide to the Identification of Marine Organisms. (1986): 397-458. Edited by W. Sterrer. John Wiley & Sons, Inc.

- Jones, M. L. "Vestimentiferan Pogonophores: Their Biology and Affinities." In

 The Origins and Relationships of Lower Invertebrates. Edited by S. C.

 Morris; J. D. George; R. Gibson; and H. M. Platt. 28 (1985): 327-342.

 The Systematics Association, Special Volume No. 28. Oxford: Clarendon Press.
- . (Editor) Hydrothermal Vents of the Eastern Pacific: An Overview.
 Biological Society of Washington (6)(1985): vii + 547 pages.
- . "On the Vestimentifera, New Phylum: Six New Species, and Other Taxa, from Hydrothermal Vents and Elsewhere." In Hydrothermal Vents of the Eastern Pacific: An Overview. Edited by M. L. Jones. (6)(1985): 117-158. Biological Society of Washington.
- Jones, M. L., and Bright, C. F. "Appendix 1. Bibliography of Hydrothermal Vents and Related Areas, their Biotas, Ecological Parameters and Ancillary Data." In Hydrothermal Vents of the Eastern Pacific: An Overview. Edited by M. L. Jones. (6)(1985): 495-538. Biological Society of Washington.
- . "Appendix 2. Dive Data of Certain Submersibles, Hydrothermal and Other Sites." In Hydrothermal Vents of the Eastern Pacific: An Overview. Edited by M. L. Jones. (6)(1985): 539-545. Biological Society of Washington.
- Jones, M. L.; Gardiner, S. L.; and Petersen, M. E. "Class Polychaeta." In

 Marine Fauna and Flora of Bermuda A Systematic Guide to the

 Identification of Marine Organisms. Edited by W. Sterrer. (1986):

 232-257. New York: John Wiley & Sons.
- Kensley, Brian. "The Fossil Occurrence in Southern Africa of the South American Intertidal Mollusc Concholepas concholepas." Annals of the South African Museum 97 (1)(1985): 1-7.
- . "Cementing Bivalve Molluscs of the Genus Chlamys ('Hinnites') in Southern Africa." South African Journal of Science 81 (10)(1985): 629-631.
- Kensley, Brian, and Heard, Richard. "A New Species of the Genus <u>Spinianirella</u> Menzies (Crustacea: Isopoda: Janiridae) from the Western Atlantic."

 <u>Proceedings of the Biological Society of Washington</u> 98 (3)(1985): 682-686.
- Kornicker, Louis S. "Sarsiellidae of the Western Atlantic and Northern Gulf of Mexico, and Revision of the Sarsiellinae (Ostracoda: Myodocopina)."

 Smithsonian Contributions to Zoology (415)(1986): i-iv, 1-217.

 Washington, D. C.: Smithsonian Institution Press.
- . "Cylindroleberididae of the Western Atlantic and Northern Gulf of Mexico, and Zoogeography of the Myodocopina." Smithsonian Contributions to Zoology (425)(1986): i-iv, 1-139. Washington, D. C.: Smithsonian Institution Press.
- . Journal article. "Azygocypridina lowryi, a New Species of Myodocopid Ostracod from Bathyal Depths in the Tasman Sea off New South Wales, Australia." Proceedings of the Biologial Society of Washington 98 (3)(1985): 698-704.
- . Journal article. "Thaumatoconcha porosa, a New Species of Abyssal Ostracod from the Indian Ocean (Halocyprida: Thaumatocyprididae)."

 Proceedings of the Biological Society of Washington 98 (4)(1985):
 1012-1021.
- Maddocks, R. F., and Kornicker, L. S. "Class Ostracoda (Mussel Shrimps)." In Marine Fauna and Flora of Bermuda. Edited by Wolfgang Sterrer. (1986): 280-288. New York: John Wiley & Sons.

- Manning, R. B. "Order Stomatopoda (Mantis Shrimps)." In Marine Fauna and Flora of Bermuda. Edited by W. Sterrer. (1986): 305-310. New York: John Wiley & Sons.
- . "Fenner A. Chace, Jr.: Biographical Notes and Bibliography." <u>Journal of Crustacean Biology</u> 6 (3)(1986): i-vi.
- Manning, R. B., and Holthuis, L. B. "Preliminary Descriptions of Four New Species of Dorippid Crabs from the Indo-West Pacific Region." Proceedings of the Biological Society of Washington 99 (2)(1986): 363-365.
- Manning, R. B., and Lewinsohn, C. "Notes on Some Stomatopod Crustacea from the Sinai Peninsula, Red Sea." Smithsonian Contributions to Zoology (433)(1986): i-iii, 1-19. Washington, D. C.: Smithsonian Institution Press.
- Pawson, D. L., and Foell, E. J. "An Annotated Atlas of Abyssal Echinoderms from the Clipperton-Clarion Fracture Zone, Equatorial Eastern North Pacific."

 In Proceedings of the Fifth International Echinodern Conference. Edited by B. Keegan. (1986): 168. Rotterdam: A.A. Balkema.
- . "Peniagone leander New Species, an Abyssal Benthopelagic Sea Cucumber (Echinodermata: Holothuroidea) from the Eastern Central Pacific Ocean."

 Bulletin of Marine Science 38 (2)(1986): 293-299.
- Pèrez Farfante, I., and Boothe, Jr., B. B. "Redescription and Range Extension of Parapenaeopsis balli Burkenroad (Decapoda: Penaeidea)." Journal of Crustacea Biology 6 (3)(1986): 401-407.

 Peters, E. C.; Halas, J. C.; and McCarty, H. B. "Neoplasia in Acropora palmata,
- Peters, E. C.; Halas, J. C.; and McCarty, H. B. "Neoplasia in Acropora palmata, with a Review of Reports on Anomalies of Growth and Form in the Stony Corals." Journal of the National Cancer Institute 76 (1986): 895-912.

 Peters, E. C., and Pilson, M. E. Q. "A Comparative Study of the Efects of
- Peters, E. C., and Pilson, M. E. Q. "A Comparative Study of the Efects of Sedimentation Stress on Symbiotic and Asymbiotic Colonies of the Coral Astrangia danae Milne Edwards & Haime 1849." J. Exp. Mar. Biol. Ecol. 92 (1985): 215-230.
- Petit, R. E., and Harasewych, M. G. "New Philippine Cancellariidae (Gastropoda: Cancellariacea), with Notes on the Fine Structure and Function of the Nematoglossan Radula." The Veliger 28 (4)(1986): 436-443.
- Pettibone, Marian H. "Review of the Iphioninae (Polychaeta: Polynoidae) and Revision of Iphione cimex Quatrefages, Gattyana deludens Fauvel, and Harmothoe iphionelloides Johnson (Harmothoinae)." Smithsonian Contributions to Zoology (428)(1986): i-iii, 1-43. Washington, D. C.: Smithsonian Institution Press.
- Rehder, Harald A. "A New Species of <u>Coralliophila</u> (Gastropoda: Coralliophilidae) from Southeastern Polynesia." <u>The Nautilus</u> 99 (4): 97-100.
- _____. "Joseph Rosewater (1928-1985). A Tribute and Bibliography." The Nautilus 100 (1): 9-13.
- "Natica (Glyphepithema) bayeri, New Name." The Nautilus 100 (1): 38.
- . "Cypraea thomasi Crosse Revalidated." Hawaiian Shell News 35(6):12.
 . "Natica (Glyphepithema) tedbayeri, a Replacement Name." The Nautilus
- . "Natica (Glyphepithema) tedbayeri, a Replacement Name." The Nautilus 100 (3): 112.

- Reid, J. W. "Chave de identificacao e lista de referencias bibliograficas para as especies sulamericans continentais de vida livre da ordem Cyclopoida (Crustacea: Copepoda)." [Key to the identification of and list of bibliographical references for the free-living continental South American Species of the Order Cyclopoida.] Boletim de Zoologia, Universidade de Sac Paulo 9 (1985): 17-143.
- ."Some usually overlooked cryptic copepod habitats." Proceedings of the Second International Conference on Copepoda. Edited by G. Schriever, H. K. Schminke, & C.-t Shih. (58)(1986): 594-598. National Museums of Canada, National Museum of Natural Sciences Syllogeus No. 58.
- . "A redescription of <u>Microcyclops ceibaensis</u> (Marsh, 1919) from Marsh's specimens in the National Museum of Natural History." <u>Proceedings of the Biological Society of Washington</u> 99 (1)(1986): 71-78.
- Roper, Clyde F. E. "Class Cephalopoda (Cuttlefishes, squids and octopuses)."

 In <u>Marine Fauna and Flora of Bermuda</u>. Edited by W. Sterrer. (1986):
 492-500. John Wiley & Sons, Inc.
- Roper, C. F. E.; Sweeney, M. J.; and Clarke, M. R. "Cephalopods." In <u>FAO</u>

 <u>Species Identification Sheets for Fishery Purposes; Southern Ocean.</u> Edited by W. Fischer and J. C. Hureau. 1 (1985): 117-205. Food and Agriculture Organization of the United Nations.
- Ruetzler, Klaus. "Porifera." In Marine Fauna and Flora of Bermuda. Edited by W. Sterrer. (1986): 111-128. New York: John Wiley & Sons. Inc.
- W. Sterrer. (1986): 111-128. New York: John Wiley & Sons, Inc. Schiff, H.; Manning, R. B.; and Abbott, B. C. "Structure and Optics of Ommatidia from Eyes of Stomatopod Crustaceans from Different Luminous Habitats." Biological Bulletin (170)(1986): 461-480.
- Sieg, J., and Heard, R. W. "Crustacea Tsnaidacea of the Gulf of Mexico. IV. On Nototanoides trifurcatus gen. et sp. nov., with a Key to the Genera of the Family Nototanaidae." Gulf Research Reports, 8 (1): 51-62.
- Suess, E.; Carson, B.; Ritger, S. D.; Moore, J. C.; Jones, M. L.; Kulm, L. D.; and Cochran, G. R. "Biological Communities at Vent Sites along the Subduction Zone off Oregon." In Hydrothermal Vents of the Eastern Pacific:

 An Overview. Edited by M. L. Jones. (6)(1985): 475-484. Biological Society of Washington.
- Thomas, J. D., and Barnard, J. L. "A New Marine Genus of the Maera Group (Amphipoda) from Belize." Proceedings of the Biological Society of Washington, 98 (1985): 630-635, 3 figures.
- Upton, S. J., and Peters, E. C. "A New and Unusual Species of Coccidium (Apicomplexa: Agamococcidiorida) from Caribbean Scleractinian Corals."

 Journal of Invertebrate Pathology 47 (1986): 184-193.
- Vecchione, M.; Roper, C. F. E.; Lu, C. C.; and Sweeney, M. J. Abstract.

 "Distribution and relative abundance of planktonic cephalopods in the western North Atlantic." American Malacological Bulletin 4 (1)(1986): 101.

- Abbott, Richard N., Jr.; Burnham, C. W.; and Post, J. E. "Energetics of Polytypism in Di-and Trioctahedral Micas." <u>Proceedings of IMA 14th Meeting, Stanford, California.</u> (1986): 41 (Abstract).
- Appleman, D. E. "James Dwight Dana and Pacific Geology." In <u>Magnificent</u>
 <u>Voyagers</u>. (1985): 88-117. Washington, D. C.: Smithsonian Institution
 Press.
- Bently, R. E.; Wilson, W. E.; and Dunn, P. J. "Mineral Specimen Mislabeling.
 Mineralogical Record 17 (1986): 579-582.
- Burnham, Charles W., and Post, J. E. "Positional Disorders of Cavity and Channel Cations in Mineral Structures: Influence of Local Framework Cation Configurations." Proceedings of IMA 14th Meeting, Stanford, California. (1986): 65 (Abstract).
- Dunn, P. J. "New Occurrences of Ushkovite, and Comments on Laueite."

 <u>Mineralogical Record</u> 16 (1985): 463-464.
- Dunn, P. J. "The Lead Silicates from Franklin, New Jersey: Occurrence and Composition." Mineralogical Magazine 49 (1985): 721-727.
- Dunn, P. J. "A New Zink Magnesium Carbonate and Data for Other Unnamed Species from Franklin and Sterling Hill." <u>Mineralogical Record</u> 17 (1986): 126-127.
- Dunn, P. J., and Francis, C. A. "Dangers to Science from Species Dealers."

 Mineralogical Record 17 (1986): 226.
- Dunn, P. J., and Leavens, P. B. "Marsturite Epitaxial on Rhodonite from Franklin, New Jersey." Mineralogical Record 17 (1986): 123-125.
- Dunn, P. J., and Peacor, D. R. "Santafeite, a Re-examination and New Empirical Formula." Mineralogical Magazine 50 (1986): 299-300.
- Dunn, P. J.; Peacor, D. R.; Valley, J. W.; and Randall, C. A. "Ganomalite from Franklin, New Jersey, and Jakobsberg, Sweden: New Chemical and Crystallographic Data." Mineralogical Magazine 49 (1985): 579-582.
- Dunn, P. J., Peacor, D. R.; Sturman, B. D.; Ramik, R. A.; Roberts, W. L.; and Nelen, J. A. "Johnwalkite, the Mn-analogue of Olmsteadite, from South Dakota." Neues Jahrbuch fur Mineralogie Monatshefte (1986): 115-120.
- Dunn, P. J.; Rouse, R. C.; and Nelen, J. A. "Hydroxyl-bearing Hedyphane from Langban, Sweden." Geologiska Foreningens i Stockholm Forhandlingar 107 (1986): 325-327.
- Fredriksson, K.; Fredriksson, B. J.; and Kraut, F. "The Hedjaz Meteorite." Meteorites 21 (1986): 159-168.
- Jacobson, C. E., and Sorensen, S. S. "Amphibole Compositions and Metamorphic History of the Rand Schist and the Greenschist Unit of the Catalina Schist, Southern California." <u>Contributions to Mineralogy and Petrology</u> 92 (1986): 308-315.
- Keller, P., and Dunn, P. J. "Mathewrogersite, a New Lead Silicate Mineral from Tsumeb, Namibia." News Jahrbuch Fur Mineralogie (1986): 203-208.
- Koeberl, C., and Fredriksson, K. (1986) Impact Glasses from Zhamanshin Crater (U.S.S.R.): Chemical Composition and Discussion of Origin." Earth and Planetary Science Letters 78 (1986): 80-88.

- MacPherson, G. J., and Phipps, S. P. "Comment on "Geochemical Evidence for the Tectonic Setting of the Coast Range Ophiolite: A Composite Island Arc-Oceanic Crust Terrane in Western California". Geology 13 (1985): 827-829.
- Mandarino, J. A.; Rachlin, A. L.; Dunn, P. J.; Lepage, Y.; Morowchick, B. L.; Ramik, R. A.; Falls, R. B.; and Back, M. E. "Mineralogy of Volkovskite from New Brunswick." Mineralogical Association of Canada Geological Association of Canada Canadian Geophysical Union, 1986 Joint Annual Meeting, Program with Abstracts 99 (1986).
- Mason, B. "The Classification of the Benares Chondrite." <u>Meteoritics</u> 21 (1986): 131-132.
- Mason, B. "Allamite Occurrences in Westland, New Zealand." New Zealand Journal of Geology and Geophysics 28 (1985): 757-759.
- Melson, W. G. "Pre-historic Eruptions of Arenal Volcano, Costa Rica." <u>Vinculos</u> 10 (1986): 20-35. San Jose, Costa Rica: Museo Nacional.
- Melson, W. G.; Barquero, J.; Saenz, R.; and Fernandez, E. "Erupciones Explosivas de Importancia en Volcanes de Costa Rica."

 <u>Volcanologia</u> 16 (1986): 15-22. Heredia, Costa Rica: Universidad Nacional.
- Melson, W. G., and Jerez, D. "Largely Degassed MAGMA OF THE 13NOV85 Plinian Phase of Ruiz Volcano, Columbia." EOS: Transactions of the American Geophysical Union 67 (1986): 406.
- Melson, W. G.; Jerez, D.; Mishara, J.; Stuckenrath, R.; O'Hearn, T.; Knapp, E.; Saenz, R.; Barquero, J.; Hopson, C. A.; Carr, M.; Borgia, A.; Sheets, P.; Snarskis, M.; and Foley, L. "Major Explosive Eruptions of Costa Rican Volcanoes." EOS: Transactions of the American Geophysical Union 66 (1985): 1153.
- Pagoaga, M. K.; Appleman, D. E.; and Stewart, J. M. "A New Barium Uranyl Oxide Hydrate Mineral. Protasite." Mineral Magazine 50 (1986): 125-128.
- Parr, W. H.; Mereiter, K.; Braithwaite, R. S. W.; Keller, P.; and Dunn, P. J. "Chenite, Pb Cu(SO 1) (OH) , a New Mineral, from Leadhills, Scotland."

 Mineralogical Magazine 50 (1986): 129-135.
- Peacor, D. R.; Dunn, P. J.; Kato, A. K.; and Wicks, F. J. Shigaite, a New Manganese Aluminum Sulfate Mineral from the Ioi Mine, Shiga, Japan." Neues Jahrbuch fur Mineralogie Monatshefte (1985): 453-457.
- Peacor, D. R.; Dunn, P. J.; Simmons, W. B.; and Wicks, F. J. "Canaphite, a New Sodium Calcium Phosphate Hydrate from the Patterson Area, New Jersey."

 Mineralogical Record 16 (1986): 467-468.
- Post, Jeffrey E., and Burnham, C. W. (1986) Ionic Modeling of Mineral Structures and Energies in the Electron Gas Approximation: TiO, Polymorphs, Quartz, Forsterite, Diopside." American Mineralogist 71 (1986): 142-150.
- Post, Jeffrey E., and Turner, S. "Structure Refinement of Romanechite Subcell and Supercell." Proceedings of the International Mineralogical Association 14th Meeting, Stanford, California. (1986): 203 (Abstract).
- Simkin, T., and Seibert, L. "Intervals Between Severe Explosive Eruptions (VEI>3)." EOS: Transactions of the American Geophysical Union 67 (1986): 396 (Abstract).
- Sorensen, S. S. "Petrologic and Geochemical Comparison of the Blueschist and Greenschist Units of the Catalina Schist Terrane, Southern California."

 Geological Society of America Memoir 164 (1986): 54-75.

- Tobisch, O. T.; Saleeby, J. B.; and Fiske, R. S. "Structural History of Continental Volcanic Arc Rocks, Eastern Sierra Nevada, California." Tectonics 5 (1986): 65-94.
- Walenta, K., and Dunn, P. J. "Philipsburgite von Neubulach im wurttembergischen Schwarzwald." Der Aufschluss 36 (1985): 163-165.
- Wilson, W. E.; Dunn, P. J.; and Bentley, R. E. "Mineral Specimen Trimming." Mineralogical Record 17 (1986): 163-165.
- White, J. S., and Nelen, J. A. "Hutchinsonite from Quiruvilca, Peru."
 Mineralogical Record 16 (1985): 459-460.

Department of Paleobiology

- Anastasakis, G. C., and Stanley, D. J. "Uppermost Sapropel, Eastern Mediterranean: Paleoceanography and Stagnation." National Geographic Research 2 (1986): 179-97.
- Behrensmeyer, A. K. "Siwalik Sediments Show River Systems." Geotimes 37 (7)(1986): 14.
- Behrensmeyer, A. K., and Cooke, H. B. S. "Paleoenvironments, Stratigraphy and Taphonomy in the African Pliocene and Early Pleistocene." In Ancestors:

 The Hard Evidence (1985): 60-62. Edited by E. Delson, New York: Alan R. Liss, Inc.
- Behrensmeyer, A. K.; Gordon, K. D.; and Yanagi, G. T. "Trampling as a Cause of Bone Surface Damage and Pseudo-cutmarks." Nature 319 (1986): 768-71.
- Berdan, J. M. "New Ostracode Genera from the Lower Devonian McMonnigal Limestone of Central Nevada." <u>Journal of Paleontology</u> 60 (2)(1986): 361-78.
- Berdan, J. M.; Boucot, A. J.; and Ferrill, B. A. "The First Fossiliferous Pridolian Beds from the Southern Appalachians in Northern Alabama, and the Age of the Uppermost Red Mountain Formation." <u>Journal of Paleontology</u> 60 (1)(1986): 180-85.
- Cheetham, A. H. "Tempo of Evolution in a Neogene Bryozoan: Rates of Morphologic Change Within and Across Species Boundaries." Paleobiology 12 (2)(1986): 190-202.
- . "Branching, Biomechanics, and Bryozoan Evolution." Proceedings of the Royal Society of London Series B 228 (1986): 151-71.
- Cifelli, R. L., and Ray, C. E. Review of "Vertebrate Zoogeography and Evolution in Australasia," edited by M. Archer and G. Clayton. Journal of Vertebrate Paleontology 6 (2)(1986): 203-5.
- Paleontology 6 (2)(1986): 203-5.

 Davies, P. J., and Macintyre, I. G. "Seminar A. Reef Growth and Sea-level Change: The Environmental Signature. Report of the Discussion." In Proceedings of the Fifth International Coral Reef Congress, Tahiti, 27

 May-1 June 1985: Volume 3, Symposia and Seminars (A) (1985): 512-15.

 Edited by C. Gabrie, J. L. Toffart, and B. Salvat. Moorea, French Polynesia: Antenne Museum-EPHE.
- DiMichele, W. A. "Diaphorodendron sp. nov., a Segregate from Lepidodendron (Pennsylvanian age)." Systematic Botany 10 (1985): 453-58.
- . "The Upward Outlook in Paleobotany." Paleobiology 11 (3)(1985): 356-59 (review).

- DiMichele, W. A.; Phillips, T. L.; and Peppers, R. A. "The Influence of Climate and Depositional Environment on the Distribution and Evolution of Pennsylvanian Coal-swamp Plants. In Geologic Factors and the Evolution of Plants (1985): 223-56. Edited by B. H. Tiffney. New Haven: Yale University Press.
- Domning, D. P.; Ray, C. E.; and McKenna, M. C. "Two New Oligocene Desmostylians and a Discussion of Tethytherian Systematics." Smithsonian Contributions to Paleobiology, no. 59 (1986). Washington, D. C.: Smithsonian Institution Press.
- Douglass, R. C. "The 1985 Joseph A. Cushman Award: Lloyd George Henbest."

 Journal of Foraminiferal Research 16 (3)(1986): 173.
- Emry, R. J., and Gawne, C. E. "A Primitive, Early Oligocene Species of Palaeolagus (Mammalia, Lagomorpha) from the Flagstaff Rim Area of Wyoming."

 Journal of Vertebrate Paleontology 6 (3)(1986): 271-80.
- Emry, R. J., and Schultze, H. -P. "Biennial Review of Vertebrate Paleontology." Geotimes 31 (2)(1986) 57-59.
- Gordon, Mackenzie, Jr. "Late Kinderhookian (Early Mississippian) Ammonoids of the Western United States." The Paleontological Society, Memoir 19, Journal of Paleontology 60 (Supplement to no. 3) (1986): 1-36.
- Gordon, Mackenzie, Jr.; Henry, T. W.; and Mamet, B. L. "Carboniferous Succession and Mississippian-Pennsylvanian Boundary, Granite Mountain, Utah, U. S. A." <u>Dixieme Congres Insternational de Stratigraphie et de Geologie du Carbonifere, Madrid, 12-17 September, 1983; Compte Rendu 4 (1985): 441-50.</u>
- Graus, R. R.; Macintyre, I. G.; and Herchenroder, B. E. "Computer Simulation of the Holocene Facies History of a Caribbean Fringing Reef, Galeta Point, Panama." In Proceedings of the Fifth International Coral Reef Congress, Tahiti, 27 May-1 June 1985: Volume 3, Symposia and Seminars (A) (1985): 317-22. Edited by C. Gabrie, J. L. Toffart, and B. Salvat. Moorea, French Polynesia: Antenne Museum-EPHE.
- Hill, A.; Drake, R.; Tauxe, L.; Monoghan, M.; Barry, J. C.; Behrensmeyer, A.; Curtis, G.; Jacobs, B. F.; Jacobs, L.; Johnson, J.; and Pilbeam, D. "Neogene Paleontology and Geochronology of the Baringo Basin, Kenya." <u>Journal of Human Evolution</u> 14 (1986): 759-73.
- House, M. R.; Gordon, Mackenzie, Jr.; and Hlavin, W. S. "Late Devonian Ammonoids from Ohio and Adjacent States." <u>Journal of Paleontology</u> 60 (1)(1986): 126-44.
- James, N. P. and Macintyre, I. G. "Carbonate Depositional Environments. Modern and Ancient. Part 1. Reefs. Zonation, Depositional Facies, Diagenesis."

 Colorado School of Mines Quarterly 80 (3)(1985): 1-70.
- Macintyre, I. G.; Multer, H. G.; Zankl, H. L.; Hubbard, D. K.; Weiss, M. P.; and Stuckenrath, R. "Growth and Depositional Facies of a Windward Reef Complex, Nonsuch Bay, Antigua, W. I." In Proceedings of the Fifth International Coral Reef Congress, Tahiti, 27 May-1 June 1985: Volume 6, Miscellaneous Papers (B) (1985): 605-10. Edited by C. Gambrie and M. Harmelin Vivien. Moorea, French Polynesia: Antenne Museum-EPHE.
- Mamay, S. H.; Miller, J. M.; Rohr, D. M.; and Stein, W. E., Jr. "Delnortea, a New Genus of Permian Plants from West Texas." Phytologia 60 (5)(1986): 345-46.

- Nelson, W. J; Eggert D. L.; DiMichele, W. A.; and Stecyk, A. C. "Origin of Discontinuities in Coal-bearing Strata at Roaring Creek (Basal Pennsylvanian of Indiana)." <u>International Journal of Coal Geology</u> 4 (1985): 355-70.
- Neumann, A. C., and Macintyre, I. G. "Reef Response of Sea Level Rise: Keep-up, Catch-up or Give-up." In <u>Proceedings of the Fifth International Coral Reef Congress</u>, Tahiti, 27 May-1 June 1985: Volume 3, Symposia and seminars (A) (1985): 105-10. Edited by C. Gabrie, J. L. Toffart, and B. Salvat. Moorea, French Polynesia: Antenne Museum-EPHE.
- Oldfield, F.; Maher, B. W.; Donoghue, J.; and Pierce, J. "Particle-size Related, Mineral Magnetic Source Sediment Linkages in the Rhode River Catchment, Maryland, USA." <u>Journal of the Geological Society</u> 142 (6)(1985): 1035-46.
- Phillips, T. L.; Peppers, R. A.; and DiMichele, W. A. "Stratigraphic and Interregional Changes in Pennsylvanian Coal-swamp Vegetation: Environmental Inferences." International Journal of Coal Geology 5 (1985): 45-109.
- Ray, C. E. "Development Committee Report." Society of Vertebrate Paleontology News Bulletin no. 137 (1986): 5-6.
- Ray, C. E. "Letter to the Editor." The Four Star [Newsletter of the Smithsonian Institution Women's Council], 7 (1)(1986): 8.
- Ray, C. E., and Domning, D. P. "Manatees and Genocide." Marine Mammal Science 2 (1)(1986): 77-78.
- Sohn, I. G. "Biostratigraphic Value of the Late Mississippian Ostracode Amphissites insignis Croneis and Thurman, 1939." Journal of Paleontology, 60 (1)(1986): 158-69.
- Stanley, D. J. "Redepositional Processes in Mediterranean Deep-sea Environments." Rapport de la Commission Internationale pour la Mer Mediterranee 29 (1985): 213-16.
- . "'Stop and Go' Redepostion of Mud by Gravity and Tractive Rather than by Hemipelagic Settling: Convulsive Events and Deep Ocean Basin Sedimentation." In Geological Society of American Abstracts with Programs, Annual Meeting 17 (1985): 725 (abstract). Boulder, Colorado: Geological Society of America.
- . "Turbidity Current Transport of Organic-rich Sediments: Alpine and Mediterranean Examples." Marine Geology 70 (1/2)(1986): 85-101.
- Stanley, D. J.; Culver, S. J.; and Stubblefield, W. L. "Petrologic and Foraminiferal Evidence for Active Downslope Transport in Wilmington Canyon." Marine Geology 69 (3/4)(1986): 207-18.
- Stanley, D. J., and Sheng, H. "Discovery of Santorini Volcanic Ash in the Nile Delta: Bearing of the Minoan Eruption on Biblical Exodus Events in Egypt."

 In Geological Society of America Abstracts with Programs Annual Meeting 17 (1985): 725 (abstract). Boulder, Colorado: Geological Society of America.
- . "Volcanic Shards from Santorini (Upper Minoan Ash) in the Nile Delta, Egypt." Nature 320 (1986): 733-35.
- . "Discovery of Santorini Volcanic Ash in the Nile Delta: Bearing of the Minoan Eruption on Biblical Exodus Events in Egypt." In American Research Center in Egypt (Egyptology) Program and Abstracts, Annual Meeting (1986): 42-43 (abstract). Boston: American Research Center in Egypt.

- Waller, T. R. "The Evolution of Ligament Systems in the Bivalvia." American Malacological Bulletin 4 (1986): 111-12 (abstract).
- . "A New Genus and Species of Scallop (Bivalvia: Pectinidae) from off Scmalia, and the Definition of a New Tribe Dectopectinini." The Nautilus 100 (2) (1986): 39-46.
- Whitmore, F. C., Jr. Review of "Winged Whales," by D. and H. E. Winn. Naturalist News, December (1985): 1.
 - . "Whale Worry Confirmed." Geotimes 31 (4)(1986): 2.
- Review of "General Features of the Paleobiological Evolution of Cetacea" by G. A. Mchedlidze. Quarterly Review of Biology 61 (2)(1986): 249-50.
- Whitmore, F. C., Jr.; Morejohn, G. V.; and Mullins, H. T. "Fossil Beaked Whales Mesoplodon longirostris Dredged from the Ocean Bottom." National Geographic Research 2 (1)(1986): 47-56.
- Yochelson, E. L. "The Operculum of the Early Middle Ordovician Gastropod Palliseria robusta Wilson." Journal of Paleontology 60 (3)(1986): 656-60.
- . Middle Devonian Styliolina obutusa (Hall) (Incertae sedis) and
 Styliolina spica (Hall) ("Vermes") from Western New York, Reconsidered."

 Journal of Paleontology 60 (3)(1986): 680-88.
- Biogeography, and Palaeoecology," by Dirk Van Damme. Earth Science Reviews 23 (1986): 239-40.
- 23 (1986): 239-40.

 Yochelson, E. L. "Charles D. Walcott: Short Time in Albany Long Time in Washington." In Geological Society of America Abstracts with programs, Northeastern Section Meeting 18 (1)(1986: 77 (abstract). Boulder, Colorado: Geological Society of America.
- Yochelson, E. L., and Mason, C. E. "A Chondrophore Coelenterate from the Borden Formation (Lower Mississippian) of Kentucky." <u>Journal of Paleontology</u> 60 (5)(1986): 1025-28.
- Yochelson, E. L., and Kirchgasser, William T. "The Youngest Styliolines and Nowakiids (Upper Devonian) Currently Known from New York." <u>Journal of Paleontology</u> 60 (3)(1986): 689-700.

Department of Vertebrate Zoology

- Ash, John S., and Olson, Storrs L. "A Second Specimen of Mirafra (Heteromirafra) sidamoensis." Bulletin of the British Ornithologists' Club 105 (4)(1985): 141-143.
- Beehler, Bruce M. "Adaptive Significance of Monogamy in the Trumpet Manucode Manucodia keraudrenii (Aves: Paradisaeidae)." In Avian Monogamy. Edited by P. A. Gowaty and D. W. Mock. Ornithological Monographs 37 (1985): 83-99.
- Beehler, Bruce M., and Finch, Brian W. "Species-checklist of the Birds of New Guinea." Australasian Ornithological Monographs 1 (1985): 1-127.
- Beehler, Bruce M.; Pratt, Thane K.; and Zimmerman, Dale A. "Birds of New Guinea." (1986). Princeton, New Jersey: Princeton University Press.
- Brandon, Ronald A.; Jacobs, Jeremy; Wynn, Addison; and Sever, David M. "A Naturally Metamorphosed Tennessee Cave Salamander (Gyrinophilus palleucus)." Journal of the Tennessee Academy of Science 61 (1986): 1-2.

- Carleton, M. D., and Robbins, C. B. "On the Status and Affinities of Hybomys planifrons (Miller, 1900) (Rodentia: Muridae)." Proceedings of the Biological Society of Washington 98 (4)(1985): 956-1003.
- Cifelli, R. L.; Ibui, A. K.; Jacobs, L. L.; and Thorington, R. W., Jr. "A Giant Tree Squirrel from the Late Miocene of Kenya." Journal of Mammalogy 67 (2)(1986): 274-283.
- Cohen, Daniel M., and Weitzman, Stanley H. "George Sprague Myers 1905-1985." Copeia 1986 (3)(1986): 851-853.
- Dunlap, S. S.; Thorington, R. W., Jr.; and Aziz, M. A. "Forelimb Anatomy of New World Monkeys: Myology and the Interpretation of Primitive Anthropoid Models." American Journal of Physical Anthropology 68 (1985): 499-517.
- Gibbs, Robert H., Jr., and McKinney, James F. "Systematics and Distribution of the Astronesthes chrysophekadion Species Complex." In Indo-Pacific Fish Biology. Edited by T. Uyeno et al. (1986): 939-940.
- Graves, Gary R. "Systematic Status of Cranioleuca furcata Taczanowski (Furnariidae)." Condor 88 (1986): 120-122.
- . "Geographic Variation in the White-mantled Barbet (Capito hypoleucus) of Colombia. Proceedings of the Biological Society of Washington 99 (1986): 61-64.
- . "Systematics of the Gorgeted Woodstars (Trochilidae: Acestrura)."

 Proceedings of the Biological Society of Washington 99 (1986): 218-264.
- Handley, Charles. "New Species of Mammals from Northern South America: A Long-tongued Bat, Genus Anoura Gray." Proceedings of the Biological Society of Washington 97 (3)(1984): 513-521.
- . "Christmas Bird Count: Lewisburg, W. Va." American Birds 38 (1984): 607.
- . "The Black-Headed Gull Inland in Virginia." The Raven 54 (1)(1985): 18-20.
- Heyer, W. Ronald. "New Species of Frogs from Boraceia, São Paulo, Brazil."

 Proceedings of the Biological Society of Washington 98 (3)(1985): 657-671.
- Heyer, W. Ronald, and Cocroft, Reginald B. "Descriptions of Two New Species of Hylodes from the Atlantic Forests of Brazil (Amphibia: Leptodactylidae)." Proceedings of the Biological Society of Washington 99 (1)(1986): 100-109.
- Hoffmann, Robert S. "A Review of the Genus Soriculus (Mammalia: Insectivora)."

 Journal, Bombay Natural History Society. 82 pp. 459-481.
- Johnson, G. David. "Scombroid Phylogeny: An Alternative Hypothesis." <u>Bulletin</u> of Marine Science 39 (1986): 1-41.
- Leviton, Alan E.; Gibbs, Robert H., Jr.; Heal, Elizabeth; and Dawson, C. E. "Standards in Herpetology and Ichthyology: Part I. Standard Symbolic Codes for Institutional Resource Collections in Herpetology and Ichthyology." Copeia 1985 (3)(1985): 802-832.
- Olson, Storrs L. "Faunal Turnover in South American Fossil Avifaunas: The Insufficiencies of the Fossil Record." Evolution 39 (5)(1985): 1174-1177.
- Province, South Africa." Annals of the South African Museum 97 (3)(1985): 57-69.
- . "A New Genus of Tropicbird (Pelecaniformes: Phaethontidae) from the Middle Miocene Calvert Formation of Maryland." Proceedings of the Biological Society of Washington 98 (4)(1985): 851-855.
- . "A Replacement Name for the Fossil Penguin Microdytes Simpson (Aves: Spheniscidae)." Journal of Paleontology 60 (3)(1986): 785.
- . "Emendation of the Name of the Fossil Rail Rallus hodgeni Scarlett."
 Notornis 33 (1)(1986): 32.

- Olson, Storrs L., and Hasegawa, Yoshikazu. "A Femur of <u>Plotopterum</u> from the Early Middle Miocene of Japan (Pelecaniformes: Plotopteridae)." <u>Bulletin</u> of the National Science Museum, Tokyo Series C 11 (3)(1985): 137-140.
- Olson, Storrs L., and James, Helen F. "The Fossil Record of Man-Caused Extinctions of Insular Birds." [Abstract.] Proceedings of the Birds and Man Symposium Held in Johannesburg 10-15 April 1983. Edited by L. John Bunning, p. 165. Johannesburg: Witwatersrand Bird Club, 1985 [=1986].
- . "The Holotype of the Laysan Finch <u>Telespiza cantans</u> Wilson (Passeriformes: Drepanidini)." <u>Bulletin of the British Ornithologists'</u> Club 106 (2)(1986): 84-86.
- Olson, Storrs L., and Rasmussen, D. Tab. "Paleoenvironment of the Earliest Hominoids: New Evidence from the Oligocene Avifauna of Egypt." Science 233 (1986): 1202-1204.
- Olson, Storrs L.; Rea, Amadeo M.; and Brodkorb, Pierce. "Comments on the Proposed Grant of Precedence to Threskiornithidae Richmond, 1917, (Aves)
 Over Plataleinae Bonaparte, 1838. Z.M.(S.)2136." <u>Bulletin of Zoological</u>
 Nomenclature 43 (1)(1986): 12-13.
- Pine, R. H., and Handley, Charles. "A Review of the Amazonian Short-tailed Opossum Monodelphis emiliae (Thomas)." Mammalia 48 (2)(1985): 239-245.
- Ripley, S. Dillon. "The Laysan Teal -- Recent History and Future?" Aviculture Magazine 91 (1 and 2)(1985): 76-78.
- . "Relationships of the Pacific Warbler Cichlornis and its Allies."

 Bulletin of the British Ornithologists' Club 105 (3)(1985): 109-112.
- . "Indian Natural History." In <u>India</u>, edited by P. Jayakar, pp. 29-36.
 Bangkok, Thailand: Media Transasia Ltd.
- . "View from the Erstwhile Ivory Tower." Studio International 199 (1013)(1986): 9-11.
- . "The Smithsonian's Role in US Cultural and Environmental Development."
 BioScience 36 (3)(1986): 153-157.
- Ripley, S. Dillon, and Beehler, Bruce M. "A New Subspecies of the Babbler Malacocincla abbotti from the Eastern Ghats, India." Bulletin of the British Ornithologists' Club 105 (2)(1985): 66-67.
- . "A Revision of the Babbler Genus <u>Trichastoma</u> and its Allies." Bulletin of the British Ornithologists' Club 127 (3)(1985): 495-509.
- . "Rails of the World, a Compilation of New Information, 1975-1983 (Aves: Rallidae)." Smithsonian Contributions to Zoology 417 (1985): 1-28.
- Springer, Victor G. [Article on Japanese Illustrator in Japanese.] Anima 153 (1985): 38-40.
- Su, J., and Tyler, James C. "Diagnoses of Arothron nigropunctatus and A. meleagris, Two Extremely Polychromatic Indo-Pacific Pufferfishes (Pisces: Tetraodontidae). Proceedings Academy Natural Sciences Philadelphia, 138 (1)(1986): 14-32, 4 figures.
- Tyler, James C. "Triacanthodidae." In Smith's Sea Fishes. Edited by M. M. Smith and P. C. Heemstra. 1047 (1986): 887-890, 4 figures.
- Tyler, James C.; Su, J.; Hardy, G. S. "A New Generic Name for Anchiscmus multistriatus Richardson 1854 (Tetraodontidae), with Notes on its Toxicity and Pufferfish Biting Behavior. Records Western Australian Museum. 13 (1)(1986): 101-120, 5 figures.

- Vanzolini, P. E., and Heyer, W. Ronald. "The American Herpetofauna and the Interchange." In <u>The Great American Biotic Interchange</u>. Edited by F. G. Stehli and S. D. Webb. (1985): 475-487.
- Vari, Richard P. "Teraponidae." In <u>Checklist of the Freshwater Fishes of Africa</u> Edited by J. Daget. (1986): 304-306.
- "Serrabrycon magoi, a New Genus and Species of Scale-eating Characid (Pisces: Characiformes) from the Upper Rio Negro." Proceedings of the Biological Society of Washington 99 (2)(1986): 328-334.
- Vari, Richard P., and Gery, J. "A New Curimatid Fish (Characiformes: Curimatidae) from the Amazon Basin." Proceedings of the Biological Society of Washington 98 (4)(1985): 1030-1034.
- Vari, Richard P., and Goulding, M. "A New Species of <u>Bivibranchia</u> (Pisces: Characiformes) from the Amazon Basin." <u>Proceedings of the Biological</u> Society of Washington 98 (4)(1985): 1054-1061.
- Webster, W. D., and Handley, Charles. "Systematics of Miller's Long-tongued Bat, Glossophaga longirostris." Occasional Papers, The Museum, Texas Tech University 100 (1986): 1-22.
- Weitzman, Stanley H., and Fink, Sara V. "Xenurobryconin Phylogeny and Putative Pheromone Pumps in Glandulocaudine Fishes (Teleostei: Characidae)."

 Smithsonian Contributions to Zoology 421 (1985): 1-121.
- Weitzman, Stanley H.; Menezes, Naercio A.; and Britski, Heraldo A.

 "Nematocharax venustus, a New Genus and Species of Fish from the Rio
 Jequitinhonha, Minas Gerais, Brazil (Teleostei: Characidae)." Proceedings
 of the Biological Society of Washington 99 (2)(1986): 335-346.
- Wynn, Addison H. "Linkage Disequilibrium and a Contact Zone in <u>Plethodon</u> cinereus on the Del-Mar-Va Peninsula." <u>Evolution</u> 40 (1)(1986): 44-54.
- Wynn, Addison H., and Zug, George R. "Observations on the Reproductive Biology of Candoia carinata (Serpentes, Boidae)." The Snake 17 (1985): 15-24.
- Zug, George R. "Cyrtodactylus pelagicus: Correct Usage." Herpetologica 16 (3)(1985): 67.
 - . "What's Under That Rock?" Science Activities 22 (4)(1985): 45.
- _____. "Leaps and Bounds. Why Have Frogs Lost Their Tails?" In The Encyclopedia of Reptiles and Amphibians. Edited by T. R. Halliday and K. Adler. (1986): 56-57.
- Zug, George R., and Balazs, George. "Skeletochronolgical Age Estimates for Hawaiian Green Turtles." Marine Turtle Newsletter 33 (1985): 9-10.
- Zug, George R.; Wynn, Addison H.; and Ruckdeschel, Carol. "Age Determination of Loggerhead Sea Turtles, Caretta caretta, by Incremental Growth Marks in the Skeleton." Smithsonian Contributions to Zoology 427 (1986): 1-34.
- Skeleton." Smithsonian Contributions to Zoology 427 (1986): 1-34.

 Zusi, Richard L. "Muscles of the Neck, Trunk and Tail in the Noisy Scrub-bird,

 Atrichornis clamosus, and Superb Lyrebirds, Menura novaehollandiae
 (Passeriformes: Atrichornithidae and Menuridae)." Records of the

 Australian Museum 37 (1985): 229-242.

Smithsonian Marine Station at Link Port

Buzas, Martin A., Culver, Stephen J., and Lawrence B. Isham. "A Comparison of Fourteen Elphidid (Foraminifera) Taxa." <u>Journal of Paleontology</u>, 59 (5)(1985): 1075-1090.

- Byrne, Maria. "Ultrastructural Changes in the Autotomy Tissues of Eupentacta quinquesemita (Selenka) (Echinodermata: Holothuroidea) During Evisceration." In Proceedings of the International Echinoderm Conference 413-420. Galway, Ireland.
- . "Evisceration Behaviour and the Seasonal Incidence of Evisceration in the Holothurian Eupentacta quinquesemita (Selenka)." Ophelia 24 (2)(1985): 75-90.
- . "The Life History of the Gastropod Thynicola americana Tikasingh Endoparasitic in a Seasonally Eviscerating Holothurian Host." Ophelia 24 (2)(1985): 91-101.
- Felder, Darryl L., and Manning, Raymond B. "A New Genus and Two New Species of Alpheid Shrimps (Decapoda: Caridea) from South Florida." <u>Journal of Crustacean Biology</u> 6 (3)(1986): 497-508.
- Fredericq, S., and Norris, J. N. "Morphological Studies on Some Tropical Species of <u>Gracilaria</u> Grev (Rhodophyta, Gracilariaceae), I: Taxonomic Concepts Based on Reproductive Morphology." In <u>Taxonomy of Economic Seaweeds</u>. <u>California Sea Grant Program</u>, Report No. T-CSGCO-011. (1985) Edited by I. A. Abbott and J. N. Norris. La Jolla, CA.
- Hakansson, Eckart and Winston, Judith E. "Interstitial Bryozoans: Unexpected Life Forms in a High Energy Environment." In <u>Bryozoa: Ordovician to Recent</u> (1985): 125-134. Edited by Claus Nielsen and Gilbert P. Larwood.
- Harasewych, M. G., and Petit, R. E. "Notes of the Morphology of Admete viridula (Gastropoda: Cancellariidae)." The Nautilus 100 (3)(1986): 85-91.
- Kropp, Roy K., and Manning, Raymond B. "Cryptochiridae, the Correct Name for the Family Containing the Gall Crabs (Crustacea: Decapoda: Brachyura)." Proceedings of the Biological Society of Washington 98 (4)(1985): 954-955.
- Littler, M. M.; Littler, D. S.; and LaPointe, B. E. "Baseline Studies of Herbivory and Eutrophication on Dominant Reef Communities of the Looe Key National Marine Sanctuary." NOAA Technical Memorandum NOS MEMD, 1 (1986).
- Littler, Mark M.; Littler, Diane S.; Blair, Stephen M.; and Norris, James N. "Deep-water Plant Communities from San Salvador Seamount, Bahamas: New Records of Distribution, Abundance and Primary Productivity." <u>Deep Sea Research</u> 33 (1986): 882-892.
- Manning, R. B., and Heard, R. W. "Additional Records for <u>Callianassa rathbunae</u> Schmitt, 1935, from Florida and the Bahamas (Crustacea: Decapoda: Callianassidae)." <u>Proceedings of the Biological Society of Washington</u> 99 (2)(1986): 347-349.
- Manning, Raymond B. "A Small Trap for Collecting Crustaceans in Shallow Water." Proceedings of the Biological Society of Washington 99 (2)(1986): 266-268.
- Manning, Raymond B., and Holthuis, L. B. "Notes on <u>Geryon</u> from Bermuda, with the Description of <u>Geryon inghami</u>, New Species (Crustacea: Decapoda: Geryonidae)." <u>Proceedings of the Biological Society of Washington</u> 99 (2)(1986): 366-373.
- Okamura, Beth. "Formation and Description of Aggregations of Mytilus edulis in the Fouling Community of San Francisco Bay, California." Journal on Marine Ecology Progress Series 30 (1986): 275-282.
- "Group Living and the Effects of Spatial Position in Aggregations of Mytilus edulis." Oecologia 69 (1986): 341-347.

- Rice, Mary E. "Sipuncula: Developmental Evidence for Phylogenetic Inference."

 In <u>The Origins and Relations of Lower Invertebrates</u> 13 (1985): 274-296.

 Edited by S. Conway Morris, J. D. George, R. G. Gibson, and H. M. Platt.

 Oxford University Press.
- . "Phylum (Peanut Worms), Sipuncula." In Fauna and Flora of Bermuda (1986): 224-228. Edited by W. Sterrer. Wiley & Sons, Inc.
- Schiff, Helga; Abbott, Bernard C.; and Manning, Raymond B. "Optics,
 Range-Finding, and Neuroanatomy of the Eye of a Mantis Shrimp, Squilla
 mantis (Linnaeus) (Crustacea: Stomatopoda: Squillidae)." Smithsonian
 Contributions to Zoology (440)(1986): 1-32.

NATIONAL PORTRAIT GALLERY

- Carr, Carolyn K., and Margaret C. S. Christman. Gaston Lachaise Portrait
 Sculpture. Washington, D.C.: National Portrait Gallery in
 association with the Smithsonian Institution Press, 1985.
- Fern, Alan M. (Review) <u>Paul Rand</u>: A <u>Designer's Art</u> by Paul Rand. <u>The New York Times Book Review</u>, November 3, 1985.
- October 1985. The University of North Carolina at Chapel Hill,
- . Russell Lee's FSA Photographs of Chamisal and Penasco, New Mexico.

 Edited by William Wroth. Santa Fe: Ancient City Press, and Taylor

 Museum of the Colorado Springs Art Center, 1985.
- . (Foreword) <u>Gaston Lachaise Portrait Sculpture</u> by Carolyn Kinder Carr and Margaret C. S. Christman, 1985.
- . (Foreword) John Frazee (1790-1852) Sculptor by Frederick S. Voss, 1986.
- Hart, Sidney. "'Engaging in Too Many Pursuits': The Many and Varied Activities of the Peale Family." <u>Documentary Editing</u> 8 (1) (March 1986):6-11.
- . "'To Encrease the Comforts of Life': Charles Willson Peale and the Mechanical Arts." The Pennsylvania Magazine of History and Biography CX (3) (July 1986):323-57.
- Miller, Lillian B. "In the Shadow of His Father: Rembrandt Peale, Charles Willson Peale, and the American Portrait Tradition." The Pennsylvania Magazine of History and Biography CX (1) (January 1986):33-70.
 - . (Review) The Correspondence and Miscellaneous Papers of Benjamin Henry Latrobe. Series IV, Volume I: 1784-1804, edited by John C. Van Horne and Lee W. Formwalt; Latrobe's View of America, 1795-1820: Selections from the Watercolors and Sketches, edited by Edward C. Carter II, John C. Van Horne, and Charles E. Brownell. The Virginia Magazine of History and Biography 94 (2) (April 1986):227-29.
- Reaves, Wendy Wick. "A Decade of Print Collecting at the National Portrait Gallery," Imprint 10(2)(Autumn 1985): 21-28.
- Reaves, Wendy Wick, and Ken Yellis. Private Lives of Public Figures: The Nineteenth-Century Family Print (study guide for teachers). Westport, Connecticut: Chesebrough-Ponds, Inc., 1986.
- Stapp, William F., with M. Susan Barger. "The Evolution of the Daguerreotype Art of Robert Cornelius: A Scientific Retrospect by Scanning Electron Microscope." Applications of Science in Examination of Works of Art. Boston Museum of Fine Arts, 1986.

- Stapp, William F. "From Artifact to Flesh," Fred E. Miller: Photographer of the Crows. University of Montana and Carnan VidFilm, Inc.: Missoula, Montana, and Malibu, California, 1985.
- Voss, Frederick S., and James C. Kelly. <u>Davy Crockett: Gentleman from the Cane</u>. Washington, D.C.: National Portrait Gallery and Tennessee State Museum, 1986.
- Voss, Frederick S. John Frazee, Sculptor. Washington, D.C.: National Portrait Gallery and The Boston Athenaeum, 1986.
- Yellis, Ken, and Education Department Staff. "Le Cafe Concert" (October 1985); "The Yellow Wallpaper" (November 1985); "Uncle Dan's Financial Tips" (November 1985); "Special Storytelling Series: Telling Lives-Frankenstein, Talkin' Tales or Why the Snail Crossed the Road and other Oral Diversions, Family Features: Stories for Everybody, Grease Heat: Tales from the American Landscape, and Personalia: Portraits in Memory" (January 1986); "A Portrait Gallery Valentine" (February 1986); "In Good Company" (March 1986); "Hughie" (April 1986); "Paul Robeson" (April 1986); "Songs I Learned at My Mother's Knee and Other Low Joints" (June 1986); "Portraits in American Jazz" (September-October 1986); Portraits in Motion Program Notes.
- Yellis, Ken, and Annette Valeo. "Calling on Museum Education Again."

 The Journal of Museum Education: Roundtable Reports, vol. 11, no. 2,

 Spring 1986, p. 2.

OFFICE OF MUSEUM PROGRAMS

Native American Museums Program

- American Indian Collections in European Museums and Archives. 1986.
- ____. Native American Historical Records: Issues and Recommendations for Development. A Report of the Native American Archives Advisory Conference conducted by the Native American Museums Program, Harpers Ferry, West Virginia, 1986.
- _____ Some Sources of Information for Native American Museums and Cultural Centers, 1986

Kellogg Project

Education. Published jointly by the Kellogg Projects in Museum Education. Published jointly by the Kellogg Projects at the Smithsonian Institution, Washington, DC; The Exploratorium, San Francisco; and the Field Museum of Natural History, Chicago. The book is a three-year report on the projects and their activities.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

- Abele, L. G. and Felgenhauer, B. E. "Phylogenetic and Phenetic Relationships among the Lower Decapoda." <u>Journal of Crustacean Biology</u> 6 (3)(1986): 385-400.
- Aid, C. S., Montgomery, G. G. and Mock, D. W. "Range Extension of the Peruvian Booby to Panama During the 1983 El Niño." Colonial Waterbirds 8 (1)(1985): 67-68.
- Aiello, A. "Sloth Hair: Unanswered Questions." In <u>The Evolution and Ecology of Armadillos, Sloths and Vermilinguas</u> (1985): 213-218. Edited by G. G. Montgomery. Washington D.C.: Smithsonian Institution Press.
- Aiello, A. and Vogt, G. "Tachygonidius dasypus (Coleoptera: Curculionidae) Observations on an Unusual Tropical Weevil."

 Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen, Series C. 89 (2)(1986): 117-120.
- Angermeier, P. L., Neves, R. J., and Karr, J. R. "Nongame Perspectives in Aquatic Resource Management." In Management of Nongame Wildlife in the Midwest: A Developing Art (1986): 43-57. Edited by J. B. Hale, L. Best and R. Clawson. Madison, Wisconsin: North Central Section, The Wildlife Society.
- Augspurger, C. K. "Double- and Single-Seeded Indehiscent Legumes of Platypodium elegans: Consequences for Wind Dispersal and Seedling Growth and Survival." Biotropica 18 (1)(1986): 45-50.
- ----. "Morphology and Dispersal Potential of Wind-Dispersed Diaspores of Neotropical Trees." American Journal of Botany 73 (3)(1986): 353-363.
- Barrett, B. A., Jorgensen, C. D. and Looman, S. J. "Foraging Recruitment by the Giant Tropical Ant, <u>Paraponera clavata</u> (Hymenoptera, Formicidae)." Pan Pacific Entomologist 61 (4)(1985): 334-338.
- Becker, P., Leighton, M. and Payne, J. B. "Why Tropical Squirrels Carry Seeds out of Source Crowns." <u>Journal of Tropical Ecology</u> 1 (2)(1985): 183-186.
- Blest, A. D. "Retinal Mosaics of the Principal Eyes of Jumping Spiders (Salticidae) in some Neotropical Habitats: Optical Trade-Offs Between Sizes and Habitat Illuminances." <u>Journal of Comparative Physiology</u> A 157 (1985): 391-404.
- Brattstrom, H. "Rocky-Shore Zonation on the Atlantic Coast of Panama." Sarsia 70 (2-3)(1985): 179-216.

- Brenowitz, E. A. and Arnold, A. P. "Lack of Sexual Dimorphism in Steroid Accumulation in Vocal Control Brain Regions of Duetting Song Birds."

 Brain Research 344 (1985): 172-175.
- Brenowitz, E. A., Arnold, A. P. and Levin, R. N. "Neural Correlates of Female Song in Tropical Duetting Birds." <u>Brain Research</u> 343 (1985): 104-112.
- Broadhead, E. and Wolda, H. "The Diversity of Psocoptera in Two Tropical Forests in Panama." <u>Journal of Animal Ecology</u> 54 (3)(1985): 739-754.
- Brokaw, N. V. L. "Seed Dispersal, Gap Colonization, and the Case of <u>Cecropia insignis</u>. In <u>Frugivores and Seed Dispersal</u> (1986): 323-331. Edited by A. Estrada and T. H. Fleming. The Netherlands: Dr. W. Junk Publishers.
- Brown, R. G. "Studies on the Taxonomy and Ecology of the Jumping Plant Lice (Homoptera: Psylloidea) of Panama" (1985). Ph. D. dissertation. Liverpool Polytechnic, Department of Biology.
- Burghardt, G. M. and Rand, A. S. "Group Size and Growth Rate in Hatchling Green Iguanas (<u>Iguana iguana</u>)." <u>Behavioral Ecology and Sociobiology</u> 18 (2)(1985): 101-104.
- Caffey, H. M. "Spatial and Temporal Variation in Settlement and Recruitment of Intertidal Barnacles." <u>Ecological Monographs</u> 55 (3)(1985): 313-332.
- Caldwell, G. S. "Predation as a Selective Force on Foraging Herons: Effects of Plumage Color and Flocking." The Auk 103 (3)(1986): 494-505.
- Cedeño B., H. A. El Medio Físico del Area de Sarigua: Base para una Política de Ordenamiento Espacial (1985). Thesis, Universidad de Panamá.
- Coates, A. G. and Jackson, J. B. C. "Morphological Themes in the Evolution of Clonal and Aclonal Marine Invertebrates." In <u>Population Biology and Evolution of Clonal Organisms</u> (1985): 67-106. Edited by J. B. C. Jackson, L. W. Buss and R. E. Cook. New Haven: Yale University Press.
- Cohen, A. C. and Morin, J. G. "Three New Luminescent Ostracodes of the Genus <u>Vargula</u> (Myodocopida, Cypridinidae) from the San Blas Region of Panama." <u>Contributions in Science</u> 343 (1986): 1-23.
- Coley, P. D. "Costs and Benefits of Defense by Tannins in a Neotropical Tree." Oecologia 70 (2)(1986): 238-241.

- Cubit, J. D. "Possible Effects of Recent Changes in Sea Level on the Biota of a Caribbean Reef Flat and Predicted Effects of Rising sea Level." In <u>Proceedings from the Fifth International Coral Reef</u>
 Congress. Antenne du Musuem National d'Histoire Naturelle et de l'Ecole Pratique des Hautes Etudes en Polynesie Francaise. Tahiti, <u>French Polynesia</u> 3 (1985): 111-118.
- Cubit, J. D., Windsor, D. M., Thompson R. C. and Burgett, J. M.
 "Water-Level Fluctuations, Emersion Regimes, and Variations of Echinoid
 Populations on a Caribbean Reef Flat." <u>Estuarine, Coastal and Shelf</u>
 <u>Science</u> 22 (6)(1986): 719-736.
- Cwikla, P. S. and Wolda, H. "Seasonality and Two New Species of Panamanian <u>Xestocephalus</u> (Hemoptera: Cicadellidae)." <u>Proceedings of</u> the Entomological Society of Washington 88 (2)(1986): 344-350.
- Decae, A. E. "Cyrtocarenum Ausserer, 1871, a Living Fossil?" In

 Proceedings of the Ninth International Congress of Arachnology, Panama

 1983 (1986): 39-44. Edited by W. G. Eberhard, Y. D. Lubin and B. C.

 Robinson. Published for the Smithsonian Tropical Research Institute by
 the Smithsonian Institution Press. Washington. D.C.
- De Steven, D. "Comparative Demography of a Clonal Palm (<u>Oenocarpus mapora</u> Subsp mapora) in Panama." Principles 30 (3)(1986): 100-104.
- De Steven, D. and Putz, F. E. "Mortality Rates of Some Rain Forests Palms in Panama." Principles 29 (4)(1985): 162-165.
- Dickson, K. A. and Graham, J. B. "Adaptations to Hypoxic Environments in the Ehythrinid Fish Hoplias microlepis." Environmental Biology of Fishes 15 (4)(1986): 301-308.
- Dressler, R. L. "Euglossine Bees (Hymenoptera: Apidae) of the Tambopata Reserved Zone, Madre de Dios, Peru." Revista Peruana de Entomologia 27 (1985): 75-79.
- ----. "Features of <u>Pollinaria</u>: an Orchid Classification." <u>Lindreana</u> 1 (1986): 125-130.
- ----. "Humus Collecting Shrubs in Wet Tropical Forests." In <u>Ecology</u> and <u>Resource Management in Tropics</u> (1985): 289-294. Edited by K. C. Misra. India: Bhargava Book Depot.
- ----. "Recent Advances in Orchid Phylogeny." Lindreana 1 (1986): 5-20.
- Proceedings of the 11th World Orchid Conference, Miami (1985): 153-158. Edited by K. W. Tan, Singapore.
- Eberhard, W. G. "Behavioral Ecology of the Tropical Damselfly Hetaeina macropus Sellys (Zygottera: Colopterytidae)." Odontologica 15 (1986): 51-56.

- In <u>Spiders Webs</u>, <u>Behavior and Evolution</u> (1986): 70-100. Edited by W. Shear. Palo Alto: Stanford University Press.
- ----. "Ontogenic Changes in the Web of Epeirotypus sp. (Araneae, Theridiosomatidae)." The Journal of Arachnology 14 (2)(1986): 125-128.
- ----. "Selección Sexual y el Comportamiento de los Insectos."

 <u>Miscellanea</u> (Sociedad Colombiana de Entomología) (1986): 16-28.
- ----. "Sub-social Behavior in the Pitting Spider <u>Scytodes intricata</u> (Araneidae, Scytoditae)." Revue Arachnologie 7 (1986): 35-40.
- ----. "The "Sawtoothed" Orb Web of Eustala sp. (Araneae, Araneidae), with a Discussion of Ontogenic Changes in Spider Web-Building Behavior." Psyche 92 (1)(1985): 105-118.
- Taxonomy." In <u>Proceedings of the Ninth International Congress of Arachnology</u>, Panama 1983 (1986): 49-52. Edited by W. G. Eberhard, Y. D. Lubin and B. C. Robinson. Published for the Smithsonian Tropical Research Institute by the Smithsonian Institution Press, Washington, D.C.
- ----. "Why are Genitalia Good Species Characters?" In Proceedings of the Ninth International Congress of Arachnology, Panama 1983 (1986): 53-60. Edited by W. G. Eberhard, Y. D. Lubin and B. C. Robinson. Published for the Smithsonian Tropical Research Institute by the Smithsonian Institution Press, Washington, D.C.
- Eberhard, W. G., Lubin, Y. D. and Robinson, B. C. (Editors). <u>Proceedings</u> of the Ninth International Congress of Arachnology, Panama 1983 (1986). Published for the Smithsonian Tropical Research Institute by the Smithsonian Institution Press, Washington, D.C.
- Emlet, R. B. "Crystal Axes in Recent and Fossil Adult Echinoids Indicate Trophic Mode in Larval Development." Science 230 (4728)(1985): 937-940.
- ----. "Facultative Planktotrophy in the Tropical Echinoid (Clypeaster rosaceus (Linnaeus) and a Comparison with Obligate Planktotrophy in Clypeaster subdepressus (Gray) (Clypeasteroida: Echinoidea)." Journal of Experimental Marine Biology and Ecology 95 (2)(1986): 183-202.
- Felgenhauer, B. E. and Abele, L. G. "Feeding Structures of Two Atyid Shrimps with Comments on Caridean Phylogeny." <u>Journal of Crustacean Biology</u> 5 (3)(1985): 397-419.
- Foster, S. A. "Group Foraging by a Coral Reef Fish: a Mechanism for Gaining Access to Defended Resources." Animal Behaviour 33 (3)(1985): 782-792.

- ----. "Wound healing: a Possible Role of Cleaning Stations." Copeia 4 (1985): 875-880.
- Franks, N. R. "Teams in Social Insects: Group Retrieval of Prey by Army Ants (Ecyton burchelli, Hymenoptera: Formicidae)." Behavioral Ecology and Sociobiology 18 (6)(1986): 425-429.
- Freed, L. A. "Territory Takeover and Sexually Selected Infanticide in Tropical House Wrens." <u>Behavioral Ecology and Sociobiology</u> 19 (3)(1986): 197-206.
- Garcia, M. N. "Cortejo y Apareamiento en Centruroides bicolor (Pocock) y sus Relaciones con Otros Miembros de la Buthidae (Scorpiones)."

 (Abstract). In Proceedings of the Ninth International Congress of Arachnology, Panama 1983 (1986): 314. Edited by W. G. Eberhard, Y. D. Lubin and B. C. Robinson. Published for the Smithsonian Tropical Research Institute by the Smithsonian Institution Press, Washington, D.C.
- Garrity, S. D. and Levings, S. C. "Interspecific Interactions and Scarcity of a Tropical Limpet." <u>Journal of Molluscan Studies</u> 51 (1986): 297-308.
- Garwood, N. C. "Constraints on the Timing of Seed Germination in Tropical Forest." In <u>Frugivores and Seed Dispersal</u> (1986): 347-355. Edited by A. Estrada and T. H. Fleming. Dirdrecht: Dr. W. Junk Publishers.
- ----. "Earthquake-Caused Landslides in Panama: Recovery of the Vegetation." National Geographic Society Research Reports 21 (1985): 181-184.
- ----. "The Role of Mucilage in the Germination of Cuipo, <u>Cavanillesia</u> <u>platanifolia</u> (H. & B.) H.B.K. (Bombacaceae), a Tropical Tree."

 American Journal of Botany 72 (7)(1985): 1095-1105.
- Glynn, P. W. "Corallivore Population Sizes and Feeding Effects Following El Niño (1982-1983) Associated Coral Mortality in Panama." <u>Proceedings of the Fifth International Coral Reef Congress, Tahiti</u> 4 (1985): 183-188.
- ----. "El Niño-Associated Disturbance to Coral Reefs and Post Disturbance Mortality by <u>Acanthaster planci</u>." <u>Marine Ecology Progress Series</u> 26 (3)(1985): 295-300.
- Greenberg, R. and Gradwohl, J. "Constant Density and Stable Territoriality in Some Tropical Insectivorous Birds." Oecologia 69 (4)(1986): 618-625.
- Hamill, D. N. and Wright, S. J. "Testing the Dispersion of Juveniles Relative to Adults: A New Analytic Method." <u>Ecology</u> 67 (4)(1986): 952-957.

- Hoffman, S. G., Schildhauer, M. P. and Warner, R. R. "The Costs of Changing Sex and the Ontogeny of Males under Contest Competition for Mates." <u>Evolution</u> 39 (4)(1985): 915-927.
- Hoffmaster, D. K. "Aggression in Tropical Orb-Weaving Spiders a Quest for Food?" Ethology 72 (4)(1986): 265-276.
- Hogan, K. P. "Plant Architecture and Population Ecology in the Palms Socratea durissima and Scheelea zonensis on Barro Colorado Island, Panama." Principes 30 (3)(1986): 105-107.
- Horn, J. M., Lees, D. C., Smith, N. G., Nash, R. J., Fellows, L. E. and Bell, E. A. "The <u>Urania-Omphalea</u> Interaction: Hostplant Secondary Chemistry" (Abstract of Poster). 6th International Symposium on Insect-Plant Relationships, Pau, France, June 30, 1986 (1986): 1p.
- Houston, D. C. "Scavenging Efficiency of Turkey Vultures in Tropical Forest." Condor 88 (3)(1986): 318-323.
- Hubbell, S. P. and Foster, R. B. "Commonness and Rarity in a Neotropical Forest, Implications for Tropical Trees Conservation." In Conservation Biology, Science of Scarcity and Diversity (1986): 105-131. Edited by M. Soule. Saunderland: Sinauer.
- ----. "Special Context of Regeneration in a Neotropical Forest." In Colonization, Succession and Stability (1986): 395-411. Edited by A. Gray. Oxford, U.K.: Blackwell Scientific.
- Jackson, J. B. C. "Distribution and Ecology of Clonal and Aclonal Benthic Invertebrates." In <u>Population Biology and Evolution of Clonal Organisms</u> (1985): 297-355. Edited by J. B. C. Jackson, L. W. Buss and R. E. Cook. New Haven: Yale University Press.
- Jackson, J. B. C., Buss, L. W. and Cook, R. E. "Clonality: a Preface."

 In <u>Population Biology and Evolution of Clonal Organisms</u> (1985): ix-xi.

 Edited by J. B. C. Jackson, L. W. Buss and R. E. Cook. New Haven:

 Yale University Press.
- Jackson, J. B. C., Buss, L. W. and Cook, R. E. (Editors). <u>Population Biology and Evolution of Clonal Organisms</u> (1985). New Haven: Yale University Press.
- Jackson, J. B. C. and Coates, A. G. "Life Cycles and Evolution of Clonal (Modular) Organisms." In <u>The Growth and Form of Modular Organisms</u> (1986): 7-22. Edited by J. L. Harper, B. R. Rosen and J. White. London: Royal Society.
- Jackson, J. B. C. and S. P. Wertheimer. "Patterns of Reproduction in Five Common Species of Jamaican Reef-Associated Bryozoans." In Bryozoa: Ordovician to Recent (1985): 161-168. Edited by C. Nielsen and G. P. Larwood. Dredensborg, Denmark: Olsen and Olsen.

- Jackson, J. B. C., Winston, J. E. and Coates, A. G. "Niche Breadth, Geographic Range, and Extinction of Caribbean Reef-Associated Cheilostome Bryozoa and Scleratinia." In <u>Proceedings of the Fifth</u> International Coral Reef Congress, Tahiti 4 (1985): 151-158.
- Johnson, L. K. "Tactics in Reproduction." (Book review on Sperm Competition and the Evolution of Animal Mating Systems, edited by R. L. Smith). Science 229 (4714)(1985): 643-644.
- Johnson, L. K. and Foster, R. B. "Association of Large Homoptera and Trees in Tropical Forest." (Abstract of Paper Presented During the Sixty-first Annual Meeting of the Central States (Kansas) Entomological Society, 20 April 1985). Journal of the Kansas Entomological Society 58 (3)(1985): 565.
- ----. "Association of Large Homoptera (Fulgoridae and Cicadidae) and Trees in a Tropical Forest." <u>Journal of the Kansas Entomological Society</u> 59 (3)(1986): 415-422.
- Karr, J. R. "Afternoon Session Summary." <u>Illinois Natural History</u> <u>Survey Bulletin</u> 33 (3)(1986): 331-333.
- ----. "Biological Monitoring and Assessment in the Solution of Environmental Problems." In <u>Proceedings of the Conference on Applications in the Guild Concept to Environmental Management</u> (1986): 50-64. Edited by W. D. Severinghaus and T. D. James. Champaign, IL.: U.S. Army Corps of Engineers, Construction Engineering Research Laboratory.
- ----. "Birds of Eucalypt Forests and Woodlands", edited by A. Keast, H. F. Recher, H. Ford, and D. Saunders. (Book review). Science 234 (4776)(1986): 620.
- ----. "Conservation of Tropical Forest Birds", edited by A. W. Diamond and T. E. Lovejoy. (Book review). The Auk 103 (3)(1986): 643-644.
- ----. "Neotropical Ornithology", edited by P. A. Buckley, M. S. Foster, E. S. Morton, R. S. Ridgely, and F. G. Buckley. (Book review). The Auk 103 (3)(1986): 649-651.
- Karr, J. R., Fauch, K. D., Angermeier, P. L., Yant, P. P. and Schlosser, I. J. In <u>Assessing Biological Integrity in Running Waters</u>. A <u>Method and Its Rationale</u> 5 (1986): 1-28. Illinois Natural History Survey, Special Publication.
- Kattan, G. and Murcia, C. "Hummingbird Association with Acorn Woodpecker Sap Trees in Colombia." The Condor 87 (4)(1985): 542-543.
- Knowlton, N. "Field Studies of Life Cycles: Focusing on Individuals." In Biology of Benthic Marine Organisms (1986): 209-215. Edited by M.-F. Thompson, R. Sarojini and R. Nagabhushanam. New Delhi: Oxford and IBH Publishing Co.

- ----. "Cryptic and Sibling Species Among the Decapod Crustacea."

 Journal of Crustacean Biology 6 (3)(1986): 356-363.
- Knowlton, N. and Keller, B. D. "Two More Sibling Species of Alpheid Shrimps Associated with the Caribbean Sea Anemones <u>Batholomea annulata</u> and <u>Heteractis lucida</u>." <u>Bulletin of Marine Science</u> 37 (3)(1985): 893-904.
- Laguna, J. "Systematics, Ecology and Distribution of Barnacles (Cirripedia: Thoracica) of Panama" (1985). San Diego, University of California.
- Leigh, Jr., E. G. "Tree Shapes in Elfin Forest." In Ecology and Resource Management in Tropics (1985): 76-80. Edited by K. C. Misra. India: Bhargava Book Depot.
- and Management, edited by S. L. Sutton, T. C. Whitmore and A. C. Chadwick.) American Scientist 73 (1)(1985): 70-71.
- Leigh, Jr., E. G., Herre E. A. and Fischer, E. A. "Sex Allocation in Animals." Experientia 41 (10)(1985): 1265-1276.
- Lessios, H. A. "Annual Reproductive Periodicity in Eight Echinoid Species on the Caribbean Coast of Panama." In <u>Proceedings of the Fifth</u>
 <u>International Echinoderm Conference, Galway, 24-29 September 1984</u>
 (1985): 303-312. Edited by B. F. Keegan and B. D. S. O'Connor.
- ----. "Genetic Consequences of Mass Mortality in the Caribbean Sea Urchin Diadema antillarum." In Proceedings of the Fifth International Congress on Coral Reef Congress, Tahiti 4 (1985): 119-132.
- Levings, S. C., Garrity, S. D. "Notes on Reproduction of a Tropical Pulmonate Limpets, Siphonaria gigas (Sowerby)." The Veliger 29 (1)(1986): 86-90.
- Levings, S. C., Garrity, S. D. and Ashkenas, L. R. "Feeding Rates and Prey Selection of Oystercatchers in the Pearl Islands of Panama." <u>Biotropica</u> 18 (1)(1986): 62-71.
- Linares, Olga F. "Ecología y Supervivencia" (A comment). Instituto Latinoamericano de Estudios Avanzados, Informe 84 (2)(1985): 1-9.
- Lubin, Y. D. "Courtship and Alternative Mating Tactics in a Social Spider." The Journal of Arachnology 14 (2)(1986): 239-257.
- ----. "Courting and Mating Decisions in a Social Spider." (Abstract).

 In Proceedings of the Ninth International Congress of Arachnology,
 Panama 1983 (1986): 316. Edited by W. G. Eberhard, Y. D. Lubin and B.
 C. Robinson. Published for the Smithsonian Tropical Research Institute
 by the Smithsonian Institution Press, Washington, D.C.

- Lubin, Y. D. and Crozer, R. H. "Electrophoretic Evidence for Population Differentiation in a Social Spider <u>Achaeranea</u> wau (Theridiidae)." Insectes Sociaux 32 (3)(1985): 297-304.
- Luer, C. A. and Dressler, R. L. "Nuevas Especies de <u>Lepanthes</u> de Panamá." <u>Orquideología</u> 16 (3)(1986): 3-26. (Includes English version).
- ----. "Una Nueva Especie de <u>Pleurothallis</u> de Panamá." <u>Orquideología</u> 16 (3)(1986): 46-52. (Includes English version).
- McNab, Brian K. "Energetics, Population Biology, and Distribution of Xenarthrans, Living and Extinct." In <u>The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas</u> (1985): 219-232. Edited by G. G. Montgomery. Washington D.C.: Smithsonian Institution Press.
- Mallet, J. "Hybrid Zones of <u>Heliconius</u> Butterflies in Panama and the Stability and Movement of Warning Colour Clines." <u>Heredity</u> 56 (2)(1986): 191-202.
- Martin, T. E. "Selection of Second-Growth Woodlands by Frugivorous Migrating Birds in Panama: an Effect of Fruit Size and Plant Density?" Journal of Tropical Ecology 1 (1)(1985): 157-170.
- Martin, T. E. and Karr, J. R. "Patch Utilization by Migrating Birds: Resource Oriented?" Ornis Scandinavica 17 (1986): 165-174.
- ----. "Temporal Dynamics of Neotropical Birds with Special Reference to Frugivores in Second-Growth Woods." <u>Wilson Bulletin</u> 98 (1)(1986): 38-60.
- Menge, B. A., Lubchenco, J., Ashkenas, L. R. and Ramsey, F. "Experimental Separation of Effects of Consumers on Sessile Prey in the Low Zone of a Rocky Shore in the Bay of Panama: Direct and Indirect Consequences of Food Web Complexity." <u>Journal of Experimental Marine Biology and Ecology</u> 100 (1986): 225-269.
- Montgomery, G. G. "Cropping of Arboreal Ants by Neotropical Mammalian Vermilingua (Cyclopes Tamandua: Xenarthra." In Ecology and Resource Management in Tropics (1985): 81-88. Edited by K.C. Misra. India: Bhargava Book Depot.
- ----. "Impact of Vermilinguas (Cyclopes, Tamandua: Xenarthra = Edentata) on Arboreal Ant Populations." In The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas (1985): 351-363. Edited by G. G. Montgomery. Washington D.C.: Smithsonian Institution Press.
- ----. "Movements, Foraging and Food Habits of the Four Extant Species of Neotropical Vermilinguas (Mammalia; Myrmecophagidae)." In The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas (1985): 365-377. Edited by G. G. Montgomery. Washington D.C.: Smithsonian Institution Press.

- ---- (Editor). The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas (1985). Washington D.C.: Smithsonian Institution Press.
- Morgan, K. R., Shelly, T. E. and Kimsey, L. S. 1985. "Body Temperature Regulation, Energy Metabolism, and Foraging in Light-Seeking and Shade-Seeking Robber Flies." <u>Journal of Comparative Physiology B</u>, 155 (5)(1985): 561-570.
- Morton, E. S. "The Realities of Reintroducing Species to the Wild." In Animal Extinctions (1985): 147-158. Edited by R. J. Hoage. Washington D.C.: Smithsonian Institution Press.
- Nentwig, W. "A Mimicry Complex between Mutiliid Wasps (Hymenoptera: Mutiliidae) and Spiders (Araneae)." Studies on Neotropical Fauna and Environment 20 (2)(1986): 113-116.
- ----. "A Tropical Caterpillar that Mimics Faeces, Leaves and a Snake (Lepidoptera: Oxytenidae: Oxytenis naemia). Journal of Research on the Lepidoptera 24 (2)(1985): 135-141.
- ----. "Non-Webbuilding Spiders: Prey Specialists of Generalists?" Oecologia 69 (4)(1986): 571-576.
- ----. "Prey Analysis of Four Species of Tropical Orb-Weaving Spiders (Araneae: Araneidae) and a Comparison with Araneids of the Temperate Zones." Oecologia 66 (4)(1985): 580-594.
- ----. "Why Are Spiders Highly Selective in What They Catch?" In Proceedings of the Ninth International Congress of Arachnology, Panama 1983 (1986): 177-180. Edited by W. G. Eberhard, Y. D. Lubin and B. C. Robinson. Published for the Smithsonian Tropical Research Institute by the Smithsonian Institution Press, Washington, D.C.
- Olson, R. R. "Photoadaptations of the Caribbean Colonial Ascidian-Cyaniphyte Symbiosis <u>Trididemnum solidum</u>." <u>The Biological Bulletin</u> 170 (1)(1986): 62-74.
- Pearson, D. L. and Dressler, R. L. "Two-Year Study of Male Orchid Bee (Hymenoptera: Apidae: Euglossini) Attraction to Chemical Baits in Lowland South-Eastern Peru." <u>Journal of Tropical Ecology</u> 1 (1)(1985): 37-54.
- Petersen, C. W. and Fischer, E. A. "Mating System of the Hermaphroditic Coral-Reef Fish, Serranus baldwini." Behavioral Ecology and Sociobiology 19 (3)(1986): 171-178.
- Piperno, D. R. "Phytolith Analysis and Tropical Paleo-Ecology: Production and Taxonomic Significance of Siliceous Forms in New World Plant Domesticates and Wild Species." Review of Paleobotany and Palynology 45 (1985): 185-228.

- Piperno, D. R., Clary K. H., Cooke, R. G., Ranere, A. J. and Weiland, D. "Preceramic Maize in Central Panama: Phytolith and Pollen Evidence." American Anthropologist 87 (4)(1985): 871-877.
- Potts, D. C. and Lessios, H. A. "Evolutionary Ecology of Reef Organisms."

 <u>Proceedings of the Fifth International Coral Reef Congress, Tahiti</u> 4

 (1985): 81-82.
- ---- "Evolutionary Ecology of Reef Organisms. Conclusion."

 Proceedings of the Fifth International Coral Reef Congress, Tahiti 4:
 159-161.
- Rabalais, N. N. and Cameron, J. N. "Physiological and Morphological Adaptations of Adult <u>Uca subcylindrica</u> to Semi-Arid Environments." Biological Bulletin 168 (1985): 135-146.
- Ramos, J. A. and Wolda, H. "Description and Distribution of Two New Species of <u>Selymbria</u> Stal from Panama (Homoptera: Cicadoidea: Tibicinidae)." <u>Caribbean Journal of Science</u> 21 (3-4)(1985): 177-185.
- Rand, A. S. "Tradeoffs in the Evolution of Frog Calls." <u>Proceedings</u> of the Indian Academy of Science 94 (6)(1985): 623-637.
- Richmond, R. H. "Variations in the Population Biology of <u>Pocillopora</u> damicornis Across the Pacific." In <u>Proceedings of the Fifth</u> International Coral Reef Congress, Tahiti 6 (1985): 101-106.
- Robertson, D. R. "Sexual Size Dimorphism in Surgeon Fishes." In Proceedings of the Fifth International Coral Reef Congress, Tahiti (1985): 403-408.
- Robertson, D. R. and Gaines, S. D. "Interference Competition Structures Habitat Use in a Local Assemblage of Coral Reef Surgeonfishes." Ecology 67 (5)(1986): 1372-1383.
- Robinson, B. and Robinson, M. H. "Resources Available to Tropical Predators on Tree Trunks and under Trees." In Ecology and Resource Management in Tropics (1985): 97-102. Edited by K. C. Misra. India: Bhargava Book Depot.
- Robinson, M. H. and Lubin, Y. D. "Specialists and Generalists: the Ecology and Behavior of Some Web-Building Spiders from Papua New Guinea. III: Gasteracantha theisi and Gasteracantha taeniata (Araneae: Araneidae)." (Abstract). In Proceedings of the Ninth International Congress of Arachnology, Panama 1983 (1986): 322. Edited by W. G. Eberhard, Y. D. Lubin and B. C. Robinson. Published for the Smithsonian Tropical Research Institute by the Smithsonian Institution Press, Washington, D.C.

- Robinson, M. H., Robinson, B. C., Murphy, F. M., and Corley W. S.

 "Egg-Sac Burying Behavior in Nephila maculata: a Specialized
 Adaptation." (Abstract). In Proceedings of the Ninth International
 Congress of Arachnology, Panama 1983 (1986): 245. Edited by W. G.
 Eberhard, Y. D. Lubin and B. C. Robinson. Published for the
 Smithsonian Tropical Research Institute by the Smithsonian Institution
 Press, Washington, D.C.
- Roubik, D. W., Moreno, J. E., Vergara, C. and Whittman, D. "Sporadic Food Competition with the African Honey Bee: Project Impact on Neotropical Social Bees." Journal of Tropical Ecology 2 (2)(1986): 97-111.
- Roubik, D. W., Sakagami, S. F. and Kudo, I. "A Note on Distribution and Nesting of the Himalayan Honey Bee Apis laboriosa Smith (Hymenoptera: Apidae)." Journal of the Kansas Entomological Society 58 (4)(1985): 746-749.
- Rubinoff, I. "Introduction." In <u>The Evolution and Ecology of Armadillos</u>, <u>Sloths, and Vermilinguas</u> (1985). Edited by G. G. Montgomery. Washington D.C.: Smithsonian Institution Press.
- Rubinoff, I., Graham, J. B. and Motta, J. "Diving of the Sea Snake Pelamis platurus in the Gulf of Panamá." Marine Biology 91 (2)(1986): 181-191.
- Ruiz, R. A. "Usos de la Tortuga Carey (<u>Eretmochelys imbricata</u>) en Panamá." <u>Biocenosis</u> 1 (4)(1985): 24.
- Ryan, M. J. "The Panamanian Love Call." <u>Natural History</u> 96 (5)(1986): 36-43.
- Ryan, M. J. and Brenowitz, E. A. "The Role of Body Size, Phylogeny, and Ambient Noise in the Evolution of Bird Song." The American Naturalist 126 (1)(1985): 87-100.
- Schauff, M. E. "Microdonophagus, a New Entedontine Genus (Hymenoptera: Eulophidae) from Panama." Proceedings of the Entomological Society of Washington 88 (1)(1986): 167-173.
- Schneider, D. C. "Predation on the Urchin <u>Echinometra lucunter</u> (Linnaeus) by Migratory Shorebirds on a Tropical Reef Flat." <u>Journal of</u> Experimental Marine Biology and Ecology 92 (1)(1985): 19-27.
- Schultz, W. "Environmental Research Unlocks Secrets of Panama." <u>Junction</u> <u>City Daily Union</u>, 23 June.
- ---- "Habitat Study Nets Data on Panama's Migratory Birds."
 Smithsonian Institution Research Reports 47 (1986): 5.8.

- Sekulic, R. and Chivers, D. J. "The Significance of Call Duration in Howler Monkeys." <u>International Journal of Primatology</u> 7 (2)(1986): 183-190.
- Shelly, T. E. "Foraging Success of Neotropical Robber Flies: Variation with Attack Distance and Angle." The Pan Pacific Entomologist 62 (2)(1986): 124-127.
- ----. "Rates of Prey Consumption by Neotropical Robber Flies (Diptera: Asilidae)." Biotropica 18 (2)(1986): 166-170.
- Smith, A. P. "Ecology of a Leaf Color Polymorphism in a Tropical Forest Species: Habitat Segregation and Herbivory." Oecologia 69 (2)(1986): 283-287.
- Smith, N. G. "The Birds of the Republic of Panama, by A. Wetmore, R. Pasquier and S. L. Olson." (Book review). <u>Wilson Bulletin</u> 97 (4)(1985): 577-578.
- ----. "Central America." The Newsletter of the Hawk Migration Association of North America 2 (2)(1986): 46.
- ---- "Counting Migrating Raptors." In <u>Proceedings of Hawk Migration</u>
 <u>Conference</u> IV (1985): 239-242. Edited by M. Howard. Hawk Migration
 Association of North America.
- Grounds" Syndrome and Future Research on Migratory Raptors." In Proceedings of Hawk Migration Conference IV (1985): 387-393. Edited by M. Howard. Hawk Migration Association of North America.
- ----. "Some Uncertain Aspects of Migration by Swainson's Hawks and Turkey Vultures." In <u>Proceedings of Hawk Migration Conference</u> IV (1985): 219-222. Edited by M. Howard. Hawk Migration Association of North America.
- ----. "Thermals, Cloud Streets, Trade Winds, and Tropical Storms: How Migrating Raptors Make the Most of Atmospheric Energy in Central America." In <u>Proceedings of Hawk Migration Conference</u> IV (1985): 51-65. Edited by M. Howard. Hawk Migration Association of North America.
- Smith, N. G., Goldstein, D. L. and Bartholomew, G. A. "Is Long-Distance Migration Possible for Soaring Hawks Using Only Stored Fat?" <u>Auk</u> 103 (3)(1986): 607-611.
- Suga, N. and Tsuzuki, K. "Inhibition and Level-Tolerant Frequency Tuning in the Auditory Cortex of the Mustached Bat." <u>Journal of Neurophysiology</u> 53 (4)(1985): 1109-1145.

- Suman, D. O. "Charcoal Production from Agricultural Burning in Central Panama and its Deposition in the Sediments of the Gulf of Panama." Environmental Conservation 13 (1)(1986): 51-60.
- Tanaka, S. "Sexual Dimorphism in <u>Stenotarsus rotundus</u> (Arrow) (Coleoptera: Endomychidae)." <u>The Ccleopterists Bulletin</u> 40 (1)(1986): 45-47.
- Todzia, C. "Growth Habits, Host Tree Species, and Density of Hemiepiphytes on Barro Colorado Island, Panama." <u>Biotropica</u> 18 (1)(1986): 22-27.
- Trainer, J. M. "Song Dialects, Cultural Evolution, and Communication in Yellow-Rumped Caciques (<u>Cacicus cela vitellinus</u>) in Panama." (1985). Ph. D. dissertation, University of Michigan.
- Ventocilla, J. "¿Alguien Sabe Cómo Funciona el Bosque?" <u>La Estrella de</u> Panamá (1986) 23 March: 7, 8, 17.
- ----. "Alternativas a la Destrucción: Lineamientos y Objetivos del Programa en Panamá." In <u>Conservación y Manejo de la Fauna Silvestre en Latinoamérica. Symposio: 10-11 Octubre 1983, Arequipa-Perú</u> (1986): 73-76. Edited by P. G. Aguilar F. Lima: Pacific Press.
- ----. "Estudiando las Aves del Parque Soberanía." <u>La Estrella de Panamá</u> (1986) 15 June: 7, 8, 17.
- ----. "Las Sorprendentes Migraciones de Buitres y Gavilanes." <u>La Prensa</u> (1985) 16 December: 1C.
- ----. "Proyecto de Cría de Iguanas en Panamá." <u>Biocenosis</u> 1 (4)(1985): 17-18.
- Victor, B. C. "Delayed Metamorphosis with Reduced Larval Growth in a Coral Reef Fish (Thalassoma bifasciatum)." Canadian Journal of Fisheries and Aquatic Sciences 43 (6)(1986): 1208-1213.
- Vollrath, F. "Environment, Reproduction and the Sex of the Social Spider Anelosimus eximius (Araneae, Theridiidae)." The Journal of Arachnology 14 (2)(1986): 267-281.
- ----. "Eusociality and Extraordinary Sex Ratios in the Spider

 Anelosimus eximius (Araneae: Theridiidae)." Behavioral Ecology and
 Sociobiology 18 (4)(1986): 283-287.
- Orb Spider <u>Araneus diadematus</u> (Araneae, Araneidae)." <u>Journal of</u> <u>Comparative Physiology</u> A, 159 (2)(1986): 275-280.
- ----. "Web Spider's Dilemma: a Risky Move or Site Dependent Growth." Oecologia 68 (1985): 69-72.

- Vollrath, F. and Houston, A. "Previous Experience and Site Tenacity in the Orb Web Spider Nephila (Araneae, Araneidae)." Oecologia 70 (2)(1986): 305-308.
- Vollrath, F. and Windsor, D. "Subsocial and Social Anelosimus: A Comparison, Especially of Nest Defense." In <u>Proceedings of the Ninth International Congress of Arachnology</u>, Panama 1983 (1986): 295. Edited by W. G. Eberhard, Y. D. Lubin and B. C. Robinson. Published for the Smithsonian Tropical Research Institute by the Smithsonian Institution Press, Washington, D.C.
- Waddington, K. D., Herbst, L. H. and Roubik, D. W. "Relationship Between Recruitment Systems of Stingless Bees and Within-Nest Worker Size Variation." <u>Journal of the Kansas Entomological Society</u> 59 (1)(1986): 95-102.
- Wellington, G. M. and Victor, B. C. "El Niño Mass Coral Mortality: a Test of Resource Limitation in a Coral Reef Damselfish Population." Oecologia 68 (1985): 15-19.
- Werner, D. I. "Iguana Management in Central America." <u>Bostid</u>
 <u>Developments</u> 6 (1)(1986): 1, 4-6.
- ----. "Manejo de la Iguana Verde en Panamá." In <u>Conservación y Manejo</u> de la Fauna Silvestre en Latinoamérica. Symposio: 10-11 Octubre 1983, <u>Arequipa-Perú</u> (1986): 77-80. Edited by P. G. Aguilar F. Lima: Pacific Press.
- West-Eberhard, M. J. "Alternative Adaptations, Speciation, and Phylogeny." (A review). Proceedings of the National Academy of Sciences of the U.S.A. 83 (5)(1986): 1388-1392.
- ----. "Dominance Relation in <u>Polistes canadenses</u>, a Tropical Social Wasp." <u>Monitore de Zoologia Italiana</u> (N.S.): 22 (1986).
- ----. "Experimental Behavioral Ecology and Sociobiology" edited by B. Holldobler and M. Lindauer." (Book review). Science 231 (4733)(1986): 64-65.
- Wheeler, D. E. "Ectatomma tuberculatum: Foraging Biology and Association with Crematogaster (Hymenoptera: Formicidae)." Annals of the Entomological Society of America 79 (2)(1986): 300-303.
- ----. "Polymorphism and Division of Labor in Azteca chartifex laticeps (Hymenoptera: Formicidae)." Journal of the Kansas Entomological Society 59 (3)(1986): 542-548.
- Wilder, G. J. "Anatomy of Noncostal Portions of Lamina in the Cyclanthaceae (Monocotyledoneae). IV. Veins of Interridege Areas, Expansion Tissue, and Adaxial and Abaxial Ridges." <u>Botanical Gazette</u> 146 (4)(1985): 545-563.

- Windsor, D. M., Herre, A. and Foster, R. "Nesting Association of Wasps, Ants and Melastomes in Peru." <u>Journal of the Kansas Entomological Society</u> 58 (3)(1985): 564-565.
- Wolda, H. "Estabilidad de Insectos en la Selva Panameña." <u>Revista</u> Peruana de Entomologia 26 (1985): 25-29.
- ----. "Insectos de las Selvas Tropicales." In <u>Memorias del Taller de</u>
 Entomología, Panamá, 2-5 de diciembre, 1985, Edited by J. Pinochet and
 G. von Lindeman (1986): 123-125. Panamá: C.A.T.I.E.
- ----. "Seasonal Distribution of Sloth Moths <u>Cryptoses choloepi</u> Dyar (Pyralidae; Chrysauginae) in light traps in Panama." In <u>The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas</u> (1985): 313-318. Washington D.C.: Smithsonian Institution Press.
- Wolda, H. and Estribí, M. "Seasonal Distribution of the Large Sloth Beetle <u>Uroxys gorgon</u> Arrow (Scarabaeidae; Scarabaeinae) in Light Traps in Panama." In <u>The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas</u> (1985): 319-322. Washington D.C.: Smithsonian Institution Press.
- Wolda, H. and Flowers, R. W. "Seasonality and Diversity of Mayfly Adults (Ephemeroptera) in a "Nonseasonal" Tropical Environment." <u>Biotropica</u> 17 (4)(1985): 330-335.
- Wolda, H. and Roubik, D. W. "Nocturnal Bee Abundance and Seasonal Bee Activity in a Panamanian Forest." <u>Ecology</u> 67 (2)(1986): 426-433.
- Wong, M. "Understory Birds as Indicators of Regeneration in a Patch of Selectively Logged West Malaysian Rainforest." In Conservation of Tropical Forest Birds 4 (1985): 249-263. Edited by A. W. Diamond and T. E. Lovejoy. ICBP Technical Publication.
- Wulff, J. L. "Clonal Organisms and the Evolution of Mutualism." In The Population Biology and Evolution of Clonal Organisms (1985): 437-466. Edited by J. B. C. Jackson, L. W. Buss and R. E. Cook. New Haven: Yale University Press.
- Biological Journal of the Linnean Society 27 (4)(1986): 311-330.
- Zucker, N. "On Courtship Patterns and the Size at which Male Fiddler Crabs (Genus Uca) Begin to Court." <u>Bulletin of Marine Science</u> 38 (2)(1986): 384-344.

- Hunt, Marjorie. "Born into the Stone: The Carvers of Washington Cathedral." Folklife Annual 1985, ed. Alan Jabbour and James Hardin, pp. 120-143. Washington, D.C.: Library of Congress, 1985.
- Kurin, Richard. [Review] Song of Hope: The Green Revolution in a Panjab

 Village, by Murray Leaf. Journal of Asian Studies 45(1)(1985):403-04.

 (and Carol Morrow). "Patterns of Solidarity in a Punjabi
- Village." Contributions to Indian Sociology 19(2)(1985):235-49.
- , ed. Indian Fairs and Festivals. Washington, D.C.: Smithsonian Institution, 1986.
- May-Machunda, Phyllis. "Hogmeat, Corn and Catfish: Tennessee Foodways."

 Festival of American Folklife Program Book, ed. Thomas Vennum, Jr., pp.

 101-104. Washington, D.C.: Smithsonian Institution, 1986.
- Proschan, Frank. "Tradition and Survival: Kmhmu Highlanders in America."

 Festival of American Folklife Program Book, ed. Thomas Vennum, Jr., pp.

 87-90. Washington, D.C.: Smithsonian Institution, 1986.
- Spitzer, Nicholas, ed. Louisiana Folklife: A Guide to the State. Baton Rouge: State of Louisiana Folklife Program, 1985.
- . "Introduction to Louisiana Folklife"; "Documenting
 Tradition: Louisiana Folklife and the Media"; "South Louisiana as a Folk
 Region"; "Louisiana Folk Crafts: An Overview" (with de Caro, Jordan and
 Roach); "Louisiana Festivals: Traditional and Otherwise." Louisiana
 Folklife: A Guide to the State, ed. Nicholas Spitzer. Baton Rouge: State
 of Louisiana Folklife Program, 1985.
- Bluebeat LP 101, 1985.
- . [Commentator] "Rainin' in My Heart: The Baton Rouge Blues."
 Louisiana Public Broadcasting, 58 min. video documentary, 1986.
- . [Co-producer and Commentator] "Music as a Symbol: The 20th Anniversary of the Festival of American Folklife Parts 1 and 2," and "Blacks, Whites and Blues: Cultural Crossover in American Folk Music." Radio Smithsonian, 30 min., 1986.
- Vennum, Thomas, Jr. "Foreword." The Federal Cylinder Project: A Guide to Field Collections in Federal Agencies, Vol. 2 (Northeastern Indian Catalog), 1985:3-7.
- Johann G. Kohl. Minnesota History 49(8) (Winter, 1985):338-39.
- and Nicholas Spitzer. "Musical Performance at the Festival:

 Developing Criteria." Festival of American Folklife Program Book, ed. Thomas
 Vennum, Jr., pp. 101-104. Washington, D.C.: Smithsonian Institution, 1986.
- , ed. Festival of American Folklife Program Book.
- Washington, D.C.: Smithsonian Institution, 1986.
- . "Music." Handbook of North American Indians, Vol. 11 (Great Basin), gen. ed. William Sturtevant, pp. 682-704. Washington, D.C.: Smithsonian Institution, 1986.

SMITHSONIAN INSTITUTION PRESS

- Williams, Martin, "Introduction" to The Third Book of Oz by L. Frank Baum (Armstrong State College Press).
- ______, "Eric Dolphy: Vintage Dolphy" (record annotation)
 (GM Recordings GM 3005D).
- and Doug Richards, "Why Aren't We Using the Jazz Classics?"

 Jazz Educators' Journal Dec./Jan. 1987.
- , "How Long Has This Been Going On? I. Con-Fusion." Jazz Times
 Jan. 1987.

OFFICE OF TELECOMMUNICATIONS

SMITHSONIAN GALAXY - 104 two-and-one-half-minute radio features

RADIO SMITHSONIAN - 52 half-hour radio programs

The partial listing of segments, which follows, contains material based on research done by Smithsonian curators or other personnel: "The Piano at Home" From "Piano in America" series, old favorites, rediscoveries, and nostalgia in concert recreation of songs sung 'round the piano in 19c America, with music historian Mark Tucker. (MAH) "Community and Cosmos" First comprehensive survey of Igbo art reveals complexity of this ancient culture. Herbert Cole and Roslyn Walker. (MAfa) "Sky Fighters" Exhibition pays tribute to Leroy Grumman and the F6F Hellcat, the plane that gave Allies control of skies in WWII. (NASM) "Halley's Comet in Babylonia" 2000-year-old tablets recently rediscovered at British Museum offer confirmation for modern computer programs tracing history of Halley's comet, with Allan Needell. (NASM) "Fire and Ice" Astronomers swing into observational action for Halley's Comet and museum offers visual commentary with comet-inspired art. (SAO/NASM) "Understanding Echinoderms" An unusual deep-water colony of urchins, starfish, brittlestars and their kin and Smithsonian scientists investigating them. (MNH)

"The Spider's Web" A tour through a bizarre world of vibrations where spiders sense their prey through web movements, with Jonathan Coddington.

(MNH)

"Revising Classic Jazz" A second look at Smithsonian Recordings set called "Classic Jazz," with music historian Martin Williams on music under consideration for revisions including works by Louis Armstrong, Charlie Parker, Stan Getz, and other jazz greats.(SIP)

"It's a Gas" 100th anniversary of gas light is celebrated with curator Bill Worthington and exhibition. (MAH)

"The Best Food in Space" An exhibition of space food with curator Derek Elliott discussing weightless cuisine on the Space Shuttle.(NASM)
"A People's History" Everyday life in 18c America presents new views of the Revolution and triumphs and struggles of people who forged often opposing opinions and lifestyles into new nation.(MAH)

"At Home on the Road" 150 years or so later, Americans were discovering the vacation. Exhibition explores nation's love affair with travel and leisure as it developed after turn of 20c. (MAH)

"Vertical Flight" New gallery devoted to man's efforts to go straight up in air with museum director Walter Boyne and assistant director Donald Lopez, authors of book on subject. (NASM)

"Flights of Fancy" Curator Claudia Oakes recounts famous first flights to far-away places—from England to southern tip of Africa, England to Australia, California to New Guinea. (NASM)

"A Paderewski Recital" Part of "Piano in America" series, this is recreation of Ignaz Jan Paderewski's first Washington appearance in February, 1892, featuring Christine Niehaus playing same Steinway he played. (MAH) "Cosmic Bubbles" A startling discovery reveals revolutionary picture of universe, with galaxies in clusters on surfaces of great bubble-like voids in space, with astrophysicists Margaret Geller, John Huchra and others. (SAO)

"Tethered Satellites" Another idea brewing: satellites on strings, attached to space stations or shuttles, to supply energy for activities and conduct tests of hard-to-reach parts of the upper atmosphere.(SAO) "Balloon Astronomy" A lot of valuable information is still coming to scientists via mankind's oldest flying machine: balloons, with astronomer Giovanni Fazio.(SAO)

"The Rising of the New Moon" Art of the Tabwa people of Central Africa reflects ancient tradition and effects of European colonial influence. Dr. Allen Roberts, guest curator of exhibition, and Smithsonian ethnomusicologist Kazadi wa Mukuna explore the cosmology of the Tabwa. (MAfa) "Garden Potteries and Official Kilns" Oriental ceremony and traditions revealed in exhibition of clan-sponsored ceramic art of 17,18,19c Japan. (FGA)

"The Biological Revolution" Advances in genetic engineering bring researchers closer and closer to unlocking secrets of infectious disease. This technology is also expanding agricultural possibilities, extracting minerals from rocks and showing promise of host of other applications. From MAH and National Institutes of Health, a look at the dawning age of recombinanant DNA; and a seminar on risks and rewards of biotechnology. (MAH/RAP) "Cataclysmic Predicting" Scientists are continually devising ways to make long-term predictions of pending natural disasters, expecially earthquakes and volcanic eruptions. (MNH/USGS)

"Lunar Leftovers" Working with NASA, NASM is documenting every piece of man-made material that is now on the moon for the sake of future historians and archeologists. (NASM)

"Go Well My Child" Photographs from South Africa in the 1940's reveal land of stark contrasts in exhibition of work by Constance Stuart Larrabee who remembers the people and words that inspired the photographs. (MAfa) "Paths to Taos and Santa Fe" Works of Ernest Blumenschein, Andrew Dasburg, Georgia O'Keeffe and other leading artists of New Mexico in early decades of 20c explored in exhibition. (NMAA)

"Persian Treasure" Story of an international treasure hunt. Buried in history, recently rediscovered, the Henri Vever collection of Persian paintings and manuscripts is acquired by the Smithsonian.(AMSG) "First Life" New permanent highlight of fossil hall features world's oldest fossils--3.5 billion-year-old algae from tidal flats of Western

"On Human Origins" Scientists and researchers discuss human fossils and the ecological environments of early man. (MNH/RAP)

Australia. (MNH)

"Today's Earth Explorers" Four modern-day explorers recount their adventures: Robert Ballard of Woods Hole Oceanographic Institute, leader of exhibition that found the Titanic; maritime historian Tim Severin, who sails reconstructions of ancient ships; Polar explorer Wally Herbert, first to complete a surface crossing of the Arctic Ocean; and geologist Farouk El Baz, who explores the Sahara desert in search of causes and solutions to drought. (RAP)

"Private Lives of Public Figures" Portraits of famous figures from 19 and 20c U.S. reveal relationship between home and heaven in domestic life of period. (NPG)

"Reaching Rural America" 90 years ago Rural Free Delivery first brought mail service to America's farmlands. With the mail came improved roads, rising farm values and the mail-order industry. RFD exhibition. (MAH)

```
"Looking at Earth" From balloons, aircraft and spacecraft, we have grown increasingly sophisticated in our views of our planet. An exhibition explores the methods and results. (NASM)
```

"Voyage 2 at Uranus" When Voyager 2 passed within 50,000 miles of Uranus, it provided man's first close look at that planet. The leader of the U.S. Geological Survey Imaging Team examines the pictures and how they enhance our knowledge of the solar system's outer planets.(NASM) "First Lady of the Smithsonian" Mary Jane Rathbun, first woman scientist hired by the Smithsonian (in 1860), was a zoologist who described more than 1000 species and subspecies and gave the Chesapeake blue crab its name (which is "beautiful swimmer" in Latin).(MNH)

"The Beeping Crab Study" Smithsonian Environmental Research Center biologist Anson Hines follows the movements of Atlantic blue crabs with ultrasonic transmitters. (ERC)

"Hollywood--Legends and Reality" Exhibition explores the history of the film industry, contrasting legends and myths of tinseltown with the realities of making movies. (MAH)

"Bon Voyage--Designs for Travel" Suitcases, wardrobes, valises, trunks, travel sets, collapsible furniture and personal accessories reveal past proclivities for peregrinations in this exhibition.(C-H)

"Coonskins and Canebrakes" Celebrating the 200th anniversary of the birth of Davey Crockett with a look at the farmer, hunter and politician from Tennessee and the legends that grew up around him.(NPG)

"The Imperial Mr. Brady" Imperial prints from the studio of Mathew Brady are featured in this exhibition.(NPG)

"Following the Killer Bees" Update on the spread of a strain of "Africanized" wild bee, introduced into Brazil and now spreading through Central America and Mexico, due in the U.S. in 1988.(MNH/STRI)

"Enigmatic Invertebrates" Paleontologist Ellis Yochelson is trying to identify a group of fossils that have no resemblance whatever to previously identified groups.(MNH)

"Zoo Plants" Rick Hider is redesigning the horticultural aspects of the zoo, offering a discourse on the finer points of planting for exotic animals. (NZP)

"Zoo Vets" Days in the lives of the Zoo's veterinarians: how to tape down a snake; checking gorillas for ulcers; elephant biopsies and more.(NZP) "Tropical Studies" A wide range of research is adding to our knowledge of tropical forest and coral reef ecology, as well as our abilities to preserve and profit from these delicate ecosystems.(STRI)

"The Search for Nemesis" Does our sun have a companion star? If it's there, will it one day affect our solar system? Scientist Ellen Sprouls details evidence and the search for the hypothetical star.(NASM)
"The Endangered Horse" Paleontologist Deb Bennett traces the evolution of the horse and explains why its future, entirely in human hands, is in doubt.(MNH)

"Do Waterfowl Have a Future?" Habitat destruction, overhunting and recurring natural disasters have put many of America's waterfowl in grave danger; nonetheless, scientists are cautiously optimistic about future.(NZP) "Grasses" An exhibition and symposium explores the role of grasses in world ecology and human civilization.(MNH)

"50 Years of Consumer Products" Exhibition examines the whys and wherefores of 50 years of washing machines, credit cards, running shoes, suburban development, compact cars, and other consumables.(C-H) "America, L.A. Style" A seminal decade, the 1940's, in the development of Southern California culture (and ultimately American culture) viewed through the reflections of well-known Americans who both loved and hated Los Angeles, as compiled by Paul Karlstrom. (AAA)

"Discoveries from Ancient Rome" Herculaneum, sister city of Pompeii, was recently unearthed and is proving to be even better preserved than Pompeii; Baldo Conticello, superintendent of the Herculaneum excavation, describes the site.(RAP)

"Ice Age History" Glacial periods of the world reviewed by museum director Robert Hoffman. (MNH)

"Jivaro Diary" Explorer/researcher Robert McCracken Peck recounts his recent travels in the Cordillera de Cutucu in Ecuador, home of the Jivaro Indians, best known for their headhunting proclivities. (RAP)

"The Hawk That's Ruled by a Mouse" On the prairies of Wisconsin, ornithologist Frances Hammerstrom has put in years of research on the secrets of the Marsh Hawk, or Harrier. Her studies have resulted in a new book.

(SIP)

"Bee Eater Society" Studies of an African bird, a species of bee eaters, reveal an advanced social order with elaborately extended families.(NZP)

HERE AT THE SMITHSONIAN... - three-minute television features

This listing contains material based on research done by Smithsonian curators or other personnel:

"Folklife '86" The 20th Smithsonian Festival of American Folklife is one of the richest ever, focusing on the diverse cultures of Japan and Tennessee.(OFP)

"Brand New at the Zoo" This year the Zoo has been blessed by the arrival of a particularly large number of exotic newborns -- from spectacled bear cubs to leopard tortoises. (NZP)

"Reaching Rural America" Delivering the mail to rural America wasn't always as easy as it is today. An exhibition celebrates 100 years of the Rural Free Delivery system. (MAH)

"At Mr. Hirshhorn's Bequest" The public gets its first chance to see some of the additional 5,300 works Mr. Hirshhorn bequeathed at his death. (HMSG)

"Corals in Captivity" An 1,800-gallon tank contains a living coral reef, a complete ecosystem in miniature for visitors to watch and for scientists to study.(MNH)

"At Home on the Road" From campers to cabins and from motels to motor-homes, a look at America's fascination with vacationing by car.(MAH) "Black Wings" An exhibition chronicles the important role of black Americans in the history of aviation.(NASM)

"Magnificent Voyagers" Major exhibition retraces America's first great scientific expedition in 1838-1842. (MNH)

"Balloon Astronomy" A discourse on high-altitude balloon science from astronomer Giovanni Fazio.(SAO)

Film and Video Productions

This listing contains material based on research done by Smithsonian curators or other personnel:

The National Teleconference on Biodiversity A two-hour live (and video-taped) telecast on the issues of crucial significance to mankind.(MNH/NZP)

The Movie Palaces A half-hour film based on the exhibition, "American Picture Palaces."(C-H)

Engines of Change An epilogue to the exhibition of the same name.(MAH)

Looking at Earth A five-minute exhibit film on Shuttle Radar Imaging.(NASM)

Smithsonian Treasures: An American Experience A 90-minute television

special with host actor Gene Kelly.(Pan-Instutional)

ADMINISTRATION

Office of Information Resource Management

- Bearman, David A. "'Who About What," or "From Whence, Why, and How':
 Establishing Intellectual Control Standards to Provide for Access
 to Archival Materials." <u>Conference on Archives. Automation. and Access.</u> Victoria, B.C., University Press, 1986.
- ______. "Archival and Bibliographic Networks." <u>Journal of Library</u>
 <u>Administration</u>, Summer 1986.
- . "Recorded Memory and Cultural Continuity." Texas Library Association, April 1986.
- Lytle, Richard H. "Information Resource Management, 1981-1986."

 Annual Review of Information Science and Technology 21:155-173.
 - ______, and David A. Bearman. "The Power of the Principle of Provenance." <u>Archivaria</u> 21:14-26 (Winter 1985-86).
- Russo, Joseph L., and Bruce B. Collette. "Interrelationships of the Spanish Mackerels (Pisces: Scombridae: Scombaromorus) and their Copepod Parasites." Cladistics 1:141-158 (no. 2).
- . "Morphology, Systematics, and Biology of the Spanish Mackerels (Scombaromorus, Scombridae)." Fishery Bulletin 82:545-692 (no. 4, 1984).
- Van Dyke, George C., and William R. Taylor. "Revised Procedures for Staining and Clearing Small Fishes and Other Vertebrates for Bone and Cartilage Study." Cybium 9:107-119 (no. 2, 1985).

Office of Printing and Photographic Services

Wallace, J. "The Planning, Construction and Operation of A Cold Room for Photographic Storage"; In <u>The Book and Paper Group Annual</u>, Volume 4 (1985):108-115. Edited by Jeffrey Abt. Washington: The Book and Paper Group, American Institute for Conservation.

- RIF Newsletter. Published three times a year, the Newsletter reports on RIF activities nationwide. A technical assistance insert, addressing local projects' requests for information on how to motivate youngsters to read, is included in Newsletters sent to RIF projects. The Newsletter reaches 24,000 people throughout the United States and offshore territories.
- Reading Is Fundamental. A newly published brochure describing the organization and its accomplishments.
- Parents' Brochures. A series of four brochures on the topics "Choosing Good Books for Your Children," "TV and Reading," "Reading Aloud to Your Children," and "Upbeat and Offbeat Activities to Encourage Reading."
- Books to Grow On: A Parent's Guide to Encouraging Young Readers. A resource for parents of children from infancy to age eleven.
- The RIF Book of Ideas. A series of booklets on fundraising, selecting books for young people, and motivating children to read.
- I Want You. A brochure to assist RIF projects in recruiting and training volunteers.
- Reading Is Fun! Tips for Parents. A booklet offering suggestions on how to encourage children up to the age of eight to read.
- Children's Bookshelf. An annotated list of 106 books for children up to the age of eleven.
- Profiles. Descriptions of the publishers and distributors that serve RIF projects. The Profiles list special discounts and services offered by each supplier and are distributed annually to all projects.

Appendix 7

The Smithsonian Institution and Its Subsidiaries, September 30, 1986

OFFICE OF THE SECRETARY

The Secretary
Executive Assistant
Special Assistant
Administrative Assistant
(Appointments)
Supervisor, Secretary's Files

Robert McCormick Adams James M. Hobbins Joseph Coudon

Mary Lee Nissley Betty J. Edwards

OFFICE OF THE UNDER SECRETARY

The Under Secretary
Administrative Assistant

Dean W. Anderson Teresa Pietroski

OFFICE OF AUDITS AND INVESTIGATIONS

Director
Deputy Director
Assistant Directors - Audits

Investigator

Chris S. Peratino
Patrick J. Stanton
Jerry L. Chandler
John C. Fawsett
Richard H. Cook

OFFICE OF THE GENERAL COUNSEL

General Counsel
Associate General Counsels

Assistant General Counsels

Peter G. Powers
Robert A. Dierker
George S. Robinson
Alan D. Ullberg
James D. Douglas
Lauryn Guttenplan Grant
Elaine L. Johnston
Sharon White Senghor
Marsha S. Shaines
James I. Wilson

OFFICE OF THE ASSISTANT SECRETARY FOR RESEARCH

Assistant Secretary
Executive Officer
Program Manager
Research Program Specialist

David Challinor
Harold J. Michaelson
Ross B. Simons
Rita R. Jordan

JOSEPH HENRY PAPERS

Editor Assistant Editors

Alministrative Officer

Marc Rothenberg Rathleen W. Dorman John C. Punta Paul Thearman Teverly Jo Larley

NATIONAL ZOOLOGICAL PARK

Director Registrar

Chief. Office of Public Affairs Chief, Office of Education

Executive Officer and Chief, Office of Management Services Vincent J. Doyle Budget Officer Management Analyst

Assistant Director for Conservation and Captive Breeding Programs

Assistant Director for Support Services

Assistant Director for Research

General Curator

Michael H. Robinson Judith Block

Robert J. Hoage Judith White

> James E. Fitzpatrick Peter B. Kibbee

Christen M. Wemmer

Gaetano G. Calise, Jr.

Devra G. Kleiman

Benjamin B. Beck

DEPARTMENT OF ANIMAL HEALTH

Veterinarian-in-Charge Associate Veterinarian Animal Physiologist

Research Associates

Prabir Chakraborty Stephen J. O'Brien

Collaborators

Michael D. Abramowitz Max J. Appel Harold Clark M. Kathryn Hammock Seth A. Koch Douglas W. McKay William J. Ravich Patricia Schmidt

R. Mitchell Bush Lyndsay G. Phillips, Jr. David E. Wildt

Beverly Gilroy

Richard Alsakar Kenneth C. Bověe Art Clexton A. Everette James, Jr. Bill Lasley Carroll Platz Edward Ruley

DEPARTMENT OF PATHOLOGY

Pathologist-in-Charge

Richard J. Montali

Research Associates

George P. Allen
Max J.G. Appel
George Imes
Bruce Smith
Bernard Zook

Richard Alsaker Chris Gardiner Michael Loomis John Strandberg

ANIMAL EXHIBIT DEPARTMENTS

General Curator

Benjamin B. Beck

DEPARTMENT OF MAMMALOGY

Curator

Edwin Gould

Associate Curator

John Seidensticker

Collection Managers

Lisa Stevens William Xanten Elizabeth Frank Edward Bronikowski

DEPARTMENT OF HERPETOLOGY

Curator

Collection Manager

Dale Marcellini Michael Davenport

DEPARTMENT OF ORNITHOLOGY

Curator

Assistant Curator Collection Manager Scott Derrickson Charles Pickett Paul Tomassoni

DEPARTMENT OF INVERTEBRATES

Curator

Jaren Horsley

DEPARTMENT OF ZOOLOGICAL RESEARCH

Assistant Director for Research

Devra G. Kleiman

Scientific Staff

Daryl J. Boness Olav T. Oftedal Miles Roberts Eugene S. Morton Katherine S. Ralls Rasanayagam Rudran

Population Manager

Jonathan Ballou

Research Associates

Mary Allen
Carolyn M. Crockett
James Dietz
John Frazier
Theodore I. Grand
James G. Hallett
Jeffrey A. McNealy
Galen B. Rathbun
John Robinson
Betsy Trent Thomas
Susan Wilson

Gerald Borgia
Priya Davidar
Wolfgang P. J. Dittus
John Gittleman
Russell G. Greenberg
Susan Lumpkin
Nancy Muckenhirn
Douglas Richards
Melvin Sunquist
Steven D. Thompson

DEPARTMENT OF CONSERVATION

Assistant Director for Conservation and Captive Breeding Programs

Facilities Manager

Research Associates

Peter August Steven Berwick Richard Estes J. L. David Smith

Fellows and Associates

Lee Boyd
Eric Dinnerstein
Frank Kohn
Katherine Mahalke-Johnson
Hemanta Mishra
Georg Schwede
Paul Wilson

SUPPORT SERVICES

Assistant Director for Support Services

Chief, Office of Facilities
Management
Chief, Office of Construction
Management
Chief, Office of Graphics and
Exhibits
Chief, Office of Police and
Safety

Christen M. Wemmer

John N. Williams

Joel Berger Catherine Blohowiak Charles McDougal Richard Watling

Susan Crissey Stefan Holzenbein John Lehmkuhl Jai Narayen Mehata Sharon Pfeifer Michael Stüwe

Gaetano G. Calilse, Jr.

David Boothe

Donald Muddiman

Robert E. Mulcahy

Samuel L. Middleton, Jr.

FRIENDS OF THE NATIONAL ZOO

Executive Director

Sanders Lewallen

OFFICE OF AMERICAN STUDIES

Director

Wilcomb E. Washburn

OFFICE OF FELLOWSHIPS AND GRANTS

Roberta W. Rubinoff
Elizabeth W. Veatch
Catherine F. Harris
Jacki Thompson Rand
Amelia F. Crittenberger
Carolin M. McManus
Lori C. Deitz

Director
Assistant Director
Administrative Officer
Academic Programs Specialist
Academic Programs Assistant
Records Programs Assistant

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

Director

Irwin I. Shapiro

Associate Directors

Planning
Atomic and Molecular Physics
High Energy Astrophysics
Optical and Infrared Astronomy
Planetary Sciences
Radio and Geoastronomy
Solar and Stellar Physics
Theoretical Astrophysics

Bruce Gregory
William H. Parkinson
Harvey Tananbaum
David W. Latham
John A. Wood
A. Edward Lilley
Andrea K. Dupree
George B. Rybicki

Department Heads

Central Engineering
Computation Facility
Contracts and Procurement
Controller's Office
Personnel
Publications

Richard B. Dias
James B. Conklin Jr.
George D. Dick
Robert T. Ayer
Harris E. Rosenthal
James C. Cornell Jr.

Scientific Staff

Luis A. Aguilar Yoram Avni Eugene H. Avrett Robert W. Babcock Sallie L. Baliunas John Biretta Eric Bloemhof Donato Bramanti Victoria Buch C. Nelson Caldwell Nathaniel P. Carleton Frederic H. Chaffee Kelly V. Chance John Chandler Jon H. Chappell M. Mark Colavita Allan F. Cook, II Alex Dalgarno Thomas M. Dame Robert J. Davis Valerie de Lapparent Marino Dobrowolny Andrzej K. Drukier Martin S. Elvis Robert Estes Giuseppina Fabbiano Daniel G. Fabricant Michel Faucherre Giovanni G. Fazio George B. Field Edward L. Fireman William Forman Fred A. Franklin Franco Fuglini Larry Gardner John C. Geary Margaret Geller Owen Gingerich Isabella Gioia Zachary Goldberg Leon Golub Paul Gorenstein

Mario Grossi Steven L. Guberman Gordon Gullahorn Alan H. Guth Carl R. Gwinn Shadia Habbal F.R. Harnden, Jr. Daniel Harris Lee W. Hartmann Robert G. Hohlfeld John P. Huchra John Hughes Christine Jones-Forman Kenneth Kalata Wolfgang Kalkofen Margarita Karovska Scott Kenyon Kate Kirby David G. Koch John L. Kohl Lawrence Krauss Michael Kurtz Robert L. Kurucz Donald Q. Lamb Myron Lecar Russell M. Levreault Robert R. Lewis Alan P. Lightman Florence J. Lin Enrico Lorenzini Tommaso Maccacaro Brian Marsden Ursula B. Marvin Robert D. Mathieu Edward Mattison Jeffrey McClintock Richard E. McCrosky Garv J. Melnick Lawrence A. Molnar James Moran Stephen Murray Philip Myers

Peter Nisenson Robert W. Noves Samuel Palmer Costas Papaliolios Julie Paque Michael Pearlman Francis Primini Harrison E. Radford John C. Raymond Robert Reasenberg Mark J. Reid Rudolph Schild Matthew H. Schneps Daniel Schwartz Joseph Schwarz Frederick Seward Michael Shao Jack Slowey Robert Stachnik J. Gregory Stacy Robert P. Stefanik Patrick Thaddeus

Wesley Traub Richard Tresch-Fienberg Ginevra Trinchieri Wallace Tucker Jean Turner Hans Ungerechts Giuseppe Vaiana Leon Van Speybroeck Robert Vessot George A. Victor Trevor C. Weekes Wei Shen Steven Weinberg Fred L. Whipple Charles A. Whitney Belinda Wilkes Steven P. Willner George L. Withbroe Diana Worrall Kouichi Yoshino Martin Zombeck

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

Director

William H. Klein

Assistant Directors

David L. Correll

Walter Shropshire, Jr.

Executive Officer Administrative Officer Office Manager Facilities Manager Carolyn M. Walker Joseph C. Fisher JoAnne Battista Robert N. Davis

Program Assistants for Public Information

Linda Chick

James Schafer

Research Scientists

Agricultural Engineer

Anthropologist Biochemist

Biologist

Ecologist Geneticist Modeler Physicist Plant Ecologist

Plant Physiologists

Zoologists

John Sager Eric Scully James Stretch Robert Stuckenrath Dennis Byrne Maurice Margulies Elizabeth Gantt Israel Levy Thomas E. Jordan Roy W. Harding, Jr. Donald Weller Bernard Goldberg Peter Curtis Allison Snow Jacob Weiner Dennis Whigham

Francis Cunningham, Jr. Gerald Deitzer
Bert Drake
William O. Smith
David Ward
Anson H. Hines

James F. Lynch

Charles F. Cleland

225

SMITHSONIAN INSTITUTION ARCHIVES

Archivist
Deputy Archivist
Associate Archivist
Historian
Assistant Archivists

William W. Moss
William A. Deiss
Alan L. Bain
Pamela M. Henson
William E. Cox
Susan W. Glenn
William R. Massa, Jr.
James A. Steed
Diane L. Vogt-O'Connor

SMITHSONIAN INSTITUTION LIBRARIES

Director Deputy Director Special Assistant Manager, Planning & Administration Administrative Assistant Publications Officer

Manager, Automated Systems Division Systems Administrator Chief, Automated Bibliographic Control Librarian, Automated Bibliographic Control Chief, Catalogue Records Chief, Original Indexing Services Cataloguer Cataloguer Cataloguer Cataloguer, Special Collections Assistant Cataloguer, Special Collections Technical Information Specialist

Assistant Director and Manager, Research Services Division

Central Services Unit

Unit Manager & Chief Librarian, Central Reference & Loan Services Mary Clare Gray Reference Librarian, CRLS Library of Congress Liaison Chief Librarian, Museum Reference Center Chief Librarian, Special Collections Branch

History and Art Unit

Unit Manager & Chief Librarian, NMAH Branch Reference Librarian, NMAH Branch Reference Librarian, NMAH Branch Chief Librarian, OH Branch Chief Librarian, CHM Branch Chief Librarian, NMAfA Branch

Museum Support Center

Chief Librarian, MSC Branch Karen Preslock

Robert Maloy Vija L. Karklins Silvio A. Bedini Mary Augusta Rosenfeld Laudine C. Creighton Nancy L. Matthews

Vija L. Karklins Thomas Garnett

Victoria Avera

Sheila Riley Brooke Henley Mary Jane H. Linn Helen Nordberg Margaret A. Sealor Bertha H. Sohn Mary L. Elder

Mayda Riopedre Mimi Scharf

Margaret S. Child

Barbara Veloz Scott Berger

Catherine D. Scott

Ellen B. Wells

Rhoda S. Ratner Charles Berger James Roan Susan Gurney Katharine Martinez Janet L. Stanley

Natural Sciences Unit

Unit Manager & Chief Librarian,
NMNH Branch
Reference Librarian, NMNH Branch
Reference Librarian, NMNH Branch
Reference Librarian, NMNH Branch
Reference Librarian, NMNH Branch
Chief Librarian, NZP Branch
Chief Librarian, SERC Branch
Chief Librarian, STRI Branch
Reference Librarian, STRI Branch

Ann Juneau
Ruth Schallert
Robert Skarr
David Steere
Mary K. Davies
Kay Kenyon
Angela Haggins
Sylvia Churgin
Roberto Sarmiento

Physical Sciences Unit

Unit Manager & Chief Librarian,
NASM Branch
Reference Librarian, NASM Branch
Reference Librarian, NASM Branch
Reference Librarian, NASM Branch
Chief Librarian, SAO Branch

Frank A. Pietropaoli Philip Edwards Monica Knudsen Amy Levin Joyce Rey-Watson

Assistant Director and Manager,
Collections Management Division

Nancy E. Gwinn

Chief, Acquisition Services
Supervisor, Monographs Purchasing
and Gifts/Exchanges
Supervisor, Serials Purchasing
Supervisor, Binding Purchasing
Chief Conservator, Book
Conservation Laboratory
Conservator
Conservator

Mildred D. Raitt

William B. Neff Lucien R. Rossignol James E. Lawson

Johannes H. Hyltoft Joyce Dreyfuss Maria Nugent

Research Associate

Jean Chandler Smith

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Director
Deputy Director
Senior Scientist
Executive Officer
Special Assistant to the Director
Superintendent, Barro Colorado
Nature Monument
Facilities Manager
Chief, Procurement Section
Personnel Specialist

Coordinator, Educational Programs

Budget Analyst

SCIENTIFIC STAFF

John H. Christy
Richard G. Cooke
John Cubit
 (resigned 08/02/86)
Robert L. Dressler
William G. Eberhard
Stephen Hubbell
Jeremy B. C. Jackson
Nancy Knowlton
Egbert G. Leigh, Jr.
Harilaos A. Lessios
Olga F. Linares

RESEARCH ASSOCIATES

Annette Aiello Robin Andrews Carlos Arellano Lennox Charles Bennett, Jr. John Bort Nicholas Brokaw Gordon M. Burghardt Terry E. Christensen Mireya Correa Luis D'Croz Kerry Ann Dressler Robin Foster Nathan Gale Pedro Galindo Judy Gradwohl Jeffrey B. Graham

Ira Rubinoff
James R. Karr
Martin H. Moynihan
Leonor Motta
Elena Lombardo

Gilberto Ocaña
Ramon Ely
Mercedes Arroyo
Hernando Leyton
Carmen Sucre
(began 09/19/86)
Georgina de Alba
Argelis Roman
(began 08/14/86)
Carmen Sucre
Carlos Urbina
(began 09/14/86)

A. Stanley Rand
D. Ross Robertson
Arcadio Rodaniche
David Roubik
Alan P. Smith
Neal G. Smith
Nicolas Smythe
Mary Jane West-Eberhard
Donald M. Windsor
Hindrik Wolda
S. Joseph Wright

Stanley Heckadon Leslie Johnson Ross Kiester Yael Lubin Ernst Mayr Jorge Motta Anthony Ranere Michael Ryan Myra Shulman Gordon B. Small W. John Smith F. Gary Stiles Henry Stockwell Katherine Troyer Paulo E. Vanzolini Fritz Vollrath

OFFICE OF THE ASSISTANT SECRETARY FOR MUSEUMS

Assistant Secretary Special Assistant Program Analyst Administrative Officer

Tom L. Freudenheim Beverly Lang Thomas J. Peyton Patricia DuVall

ANACOSTIA NEIGHBORHOOD MUSEUM

Director Administrative Officer Director of Research Education Specialist Supervisory Visual Information Specialist Sharon Reinckens Supervisory Exhibits Specialist

John R. Kinard Audrey Archer Vacant Zora Felton James Mayo

ARCHIVES OF AMERICAN ART

Washington Headquarters Office

Director Senior Curator Curator of Manuscripts Collections Manager Area Collector Administrative Officer

Richard N. Murray Garnett McCoy Arthur Breton Judy E. Throm Liza Kirwin Sherrill Berger

New York Headquarters Office

Deputy Director Development Officer Administrative Assistant

Susan Hamilton Ilene Rubin Larry Clark

Midwest Regional Center

Regional Director

Sue Ann Kendall

New York Regional Center

Regional Director

William McNaught

New England Regional Center

Regional Director

Robert Brown

West Coast Regional Center

Regional Director

Paul Karlstrom

Southern California Research Center

Area Collector

Stella Paul

CENTER FOR ASIAN ART: ARTHUR M. SACKLER GALLERY and FREER GALLERY OF ART

Director Assistant Director, Freer Gallery Assistant Director, Sackler Gallery Assistant Director, Administration Curator, Chinese Art Curator, Near Eastern Art Assistant Curator, Japanese Art Coordinator of Special Programs Head Conservator, Technical Laboratory Head Conservation Specialist Museum Specialist (Ceramics) Exhibition Designer Head Librarian Head Registrar Public Affairs Officer Director, Merchandising and Marketing Docent Coordinator Honorary Associates

Thomas Lawton
Richard Louie
Milo C. Beach
Sarah L. Newmeyer
Shen C. Y. Fu
Glenn D. Lowry
Ann Yonemura
Esin Atil

W. Thomas Chase Ryo Nishiumi Louise A. Cort Patrick H. Sears, III Ellen A. Nollman Eleanor Radcliffe Susan Bliss

Rosaria Guaragna Gayle Southworth Richard Edwards Calvin French

CONSERVATION ANALYTICAL LABORATORY

Administration

Director
Deputy Director
Adminstrative Officer
Technical Information Specialist
Sr. Conservation Information Aide
Sr. Conservation Information Aide

Lambertus van Zelst Alan W. Postlethwaite Vernetta M. Williams Marjorie W. Cleveland Bernard F. Gallagher Sherry L. Medley

Archaeometry

Administrator, Archaeometry Senior Research Archaeologist Senior Research Chemist Senior Research Physicist Chemist Jacqueline S. Olin Ronald L. Bishop James M. Blackman Yu-Tarng Cheng Emile Joel

Conservation

Supervisory Conservator
Chief Textile Conservator
Chief Paintings Conservator
Chief Objects Conservator
Objects Conservator
Objects Conservator
Objects Conservator
Chief Paper Conservator
Senior Paper Conservator
Chief Furniture Conservator
Furniture Conservator

Eleanor McMillan
Mary W. Ballard
Roland H. Cunningham
Carol A. Grissom
Mary L. Garbin
Donna K. Strahan
Susan West
Timothy J. Vitale
Diane van der Reyden
Marc A. Williams
Donald Williams

Conservation Science

Organic Chem., Group Leader
Research Organic Chemist
Organic Chemist
Inorganic Chem., Group Ldr.
Metallurgist
Conservation Scientist
Ceramic Scientist
Chemist
Senior Research Scientist

David W. Von Endt
W. David Erhardt
Walter R. Hopwood
Edward V. Sayre
Martha E. Goodway
Joan W. Mishara
Pamela Vandiver
Harold Westley
Timothy D. Padfield

Research Associates & Collaborators

Research Associate
Research Associate
Research Associate
Research Associate
Research Collaborator
Research Collaborator
Research Collaborator

Susan Hobbs
David W. Kingery
Robert M. Organ
Rita P. Wright
Patricia Crown
Emlen Myers
Dorie Reents

Visiting Scientist

Visiting Scientist Visiting Scientist Veletta Canouts Sophie Mèry

Fellows

Materials Science Fellow Materials Science Fellow Wenner Gren Fellow Nancy Benco Robert Ehrenreich Rosemary Gianno

Interns

Postgraduate Intern, Objects
Intern, Objects
Intern, Textiles
Intern, Textiles
Intern, Paper
Intern, Textiles

Ann Boulton
Lisa Goldberg
Elsje Jenssen
Diane S. Kessler
Jane Sugarman
Elizabeth Tait
Lisa R. Thorsen

COOPER-HEWITT MUSEUM

Director Assistant Director Administrator

Intern, Textiles

Administrative Specialist.

Administrative Assistant to Director.

Administrative Assistant to Assistant Director

Curator of Drawings and Prints Curator of Decorative Arts

Curator of Textiles.

Assistant Curator of Textiles

Museum Technician for Wallcoverings

Librarian

Conservator, Textiles Conservator, Paper

Registrar.

Museum Registrar Specialist.

Editor.

Exhibition Coordinator Exhibition Researcher

Public Information Manager Public Information Assistant

Management Analyst
Program Coordinator
Program Coordinator
Program Assistant
Development Officer
Development Assistant
Membership Officer
Museum Shop Manager

Special Events Coordinator

Chief of Security Building Manager

Maintanence Worker Foreman

Lisa Taylor

Harold Francis Pfister

Linda Dunne William Gaske Larry Deemer Anne Patterson Elaine Evans Dee

David Revere McFadden

Milton Sonday Gillian Moss Ann Dorfsman

Katherine Martinez

Lucy Commoner Konstanze Bachmann Cordelia Rose Steven Langehough

Nancy Aakre
Dorothy Globus
Lucy Fellowes
Arthur Lindo
Michelle Raphoon
Jay Vanatta
Susan Yelavich
George King
Mary Funnell

George Nichols
Greta Wharton
Susann Sweetser
Polly Dufresne
Elizabeth Hall
Luis Palau

Jim Ledford Barry Johnson

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Director
Deputy Director
Executive Officer
Chief Curator
Curator of Exhibitions
Associate Curators

Librarian Chief Conservator Conservators

Registrar
Chief, Education
Chief, Exhibits and Design
Public Information Officer
Photographer
Building Manager

*resigned June 27, 1986
**resigned August 29, 1986

James T. Demetrion Stephen E. Weil Nancy Kirkpatrick Charles W. Millard* Cynthia Jaffee McCabe Valerie J. Fletcher Frank B. Gettings Phyllis Rosenzweig Judith Zilczer Anna Brooke Laurence Hoffman Leland Aks Clarke Bedford Susan Lake Meredith Mickelson Douglas Robinson Edward P. Lawson Joseph Shannon** Sidney Lawrence Lee Stalsworth Frank Underwood

NATIONAL AIR AND SPACE MUSEUM

Director

Acting Director Deputy Director

> Chief, Information Management Registrar

Museum Facilities Manager Associate Director for Research Director, Educational Planning

Chief, Education

Chief, Publications and Special

Projects

Acting Chief, Volunteer Services
Program Manager, University Programs
Associate Director for External Affairs

Assistant Director for Resource

Management

Theater Manager

Chief, Public Affairs and Museum Services

Special Events Coordinators

Walter J. Boyne (resigned August 1986) James C. Tyler (since August 1986)

Donald S. Lopez
Karl P. Suthard
Robin A. Schroffel
Claude D. Russell
Paul A. Hanle
Helen C. McMahon

Kasse Andrews-Weller

Patricia J. Graboske Patricia M. Long Patricia C. Zegowitz Brian M. Duff

M. Antoinette Amos Ronald E. Wagaman

Rita C. Cipalla Darlene A. Rose Sandra G. Zafren Membership and Corporate Relations
Officer
Administrative Officer
Director, Advanced Projects
Historian Emeritus
Chairman, Department of Aeronautics
Special Adviser for Technology
Senior Curator

Associate Curator
Assistant Curator
Historian
Chairman, Center for Earth and
Planetary Studies
Geologists

Curators

Research Associate
Chairman, Space Science and Exploration
Department
Associate Curators

Assistant Curators

Historian
Chief, Planetarium Unit
Assistant Director for Exhibits
Chief, Design Unit
Chief, Production Unit
Chief, Audiovisual Unit
Chief, Art Unit
Chief, Media Resources
Assistant Director for Operations
Chief, Preservation and Restoration
Operations
Shipping and Storage Manager

Marilyn E. Lyons
Wendy A. Stephens
Hernan I. Otano
Paul E. Garber
Edmund T. Wooldridge
Howard S. Wolko
Robert C. Mikesh
R.E.G. Davies
Von D. Hardesty
Claudia M. Oakes
Dominick A. Pisano
Robert van der Linden
Peter L. Jakab

Ted A. Maxwell
Patricia A. Jacobberger
Priscilla L. Strain
Thomas R. Watters
Constance G. Andre

David H. DeVorkin Paul E. Ceruzzi Linda N. Ezell Allan A. Needell Derek W. Elliott Joseph N. Tatarewicz Frank H. Winter Cathleen S. Lewis James H. Sharp Nadya A. Makovenyi Lucius E. Lomax Harold J. Pippin John E. Hartman Mary S. Henderson Patricia A. Woodside Edward B. Chalkley

Walter R. Roderick Alfred J. Bachmeier

AIR & SPACE/SMITHSONIAN MAGAZINE

Editor
Managing Editor
Picture Editor
Senior Editor/Space

Publisher
Advertising Director
Circulation Director
Business Manager
Production Manager

George Larson Philip Hayward Lee Battaglia Linda Billings

Joseph J. Bonsignore Charles R. Berry Jadine Zemsky Diana Farrar Sarah D. Kingsley

NATIONAL MUSEUM ACT

Program Coordinator Program Assistant Barbara K. Schneider Paul T. Vittucci

NATIONAL MUSEUM OF AFRICAN ART

Director
Associate Director for
Collections and Research
Assistant Director
Founding Director Emeritus
Curators

Assistant Curators

Public Affairs Officer
Director of Development
Curator of Education
Chief, Exhibition Production
Chief, Office of Design
Conservator
Photo Archivist
Librarian
Docent/Intern Coordinator
Writer/Editor
Graphic Designer
Photographer

Sylvia H. Williams

Roy Sieber Jean Salan Warren Robbins Lydia Puccinelli Roslyn A. Walker Bryna Freyer Andrea Nicolls Margaret Bertin Donna Ari Edward Lifschitz Basil Arendse Richard Franklin Stephen Mellor Judith Luskey Janet Stanley Marjorie Turgel Dean Trackman Christopher Jones Jeffrey Ploskonka

NATIONAL MUSEUM OF AMERICAN ART

Director Deputy Director

Assistant Director and Chief Curator Assistant Director, Museum Programs Assistant Director, Museum Resources

Administrative Officer Senior Curatorial Advisor

Director, Renwick Gallery

Curator, Renwick Gallery
Research Curator
Curators, Painting and Sculpture

Associate Curator, Painting and Sculpture Curator, Graphic Arts Associate Curators, Graphic Arts

Assistant Curator, Painting and Sculpture Assistant Curator, Barney Studio House Senior Conservator Conservators

Deputy Assistant Director for Museum Programs Registrar Assistant Registrar for Loans Assistant Registrar for Permanent Collection Assistant Registrar for Packing and Shipping Chief, Office of Design and Production Chief Designer, Office of Design and Production Chief, Office of Research Support Assistant Chief, Office of Research Support Coordinator, Computer Resources Coordinator, Inventory of American Paintings Chief, Office of Publications Chief, Office of Public Affairs Chief, Office of Intern Programs

Charles C. Eldredge Charles J. Robertson (since 7/6/86) Elizabeth Broun Barbara Shissler Nosanow Charles J. Robertson (until 7/5/86)Sherwood A. Dowling Adelyn D. Breeskin (deceased 7/24/86) Lloyd E. Herman (resigned 5/30/86) Michael W. Monroe Lois M. Fink Virginia M. Mecklenburg Harry Z. Rand William H. Truettner

Robin L. Bolton-Smith Joann G. Moser Merry A. Foresta Martina R. Norelli

Lynda Roscoe Hartigan

Jean L. Kling Stefano Scafetta Ann M. Creager Fern Bleckner R. Quentin Rankin

Judith R. O'Sullivan W. Robert Johnston Melissa L. Kroning Thomas W. Bower (resigned 9/13/86)

Michael R. Smallwood

James W. Volkert

Val E. Lewton Eleanor E. Fink

Rachel M. Allen Elizabeth L. Murphy

Christine M. Hennessey
Gaye L. Brown
Margery A. Byers
Patricia H. Chieffo

Head, Special Services Programs
Head, Docents and Volunteer Services
Chief Photographer
Librarian NMAA/NPG
Assistant Librarian NMAA/NPG
Building Manager NMAA/NPG

Margaret P. Cogswell Nora M. Panzer Michael G. Fischer Cecilia H. Chin Patricia M. Lynagh Helen M. Dalaski

NATIONAL MUSEUM OF AMERICAN HISTORY

DIRECTOR'S OFFICE

Director
Deputy Director
Assistant Director for
Administration
Administrative Officer
Special Assistants

Roger G. Kennedy Douglas E. Evelyn

Ronald E. Becker Elizabeth E. Greene Naomi Glass Lawrence A. Bush James D. Whoolery

External Affairs Office

Director
Development
Public Affairs
Special Events

Renee Kortum

NATIONAL NUMISMATICS COLLECTION

Executive Director Curators

Elvira Clain-Stefanelli Coralee C. Gillilland Richard Doty

NATIONAL PHILATELIC COLLECTION

Executive Director Curators

Herbert R. Collins Reidar Norby James H. Bruns

AFRO-AMERICAN COMMUNITIES PROJECT

Director James O. Horton

ARCHIVES CENTER

Senior Archivist Archivists John Fleckner Carol Dreyfus Robert Harding Jane H. Odom Spencer Crew

Historian

OFFICE OF BUILDING MANAGEMENT

Building Manager

Richard A. Day .

COMPUTER SERVICES CENTER

Chief

Dennis S. Dickinson

DIVISION OF CONSERVATION

Head Conservator Conservators

J. Scott Odell Martin Burke Ann Craddock Nikki Horton Lynne Gilliland

EISENHOWER INSTITUTE FOR HISTORICAL RESERACH

Director

Vacant

DEPARTMENT OF EXHIBITS

Assistant Director for Exhibits J. Michael Carrigan
Deputy Assistant Director Richard J. Nicastro
Chief, Design Division Deborah M. Bretzfelder Chief, Exhibits Production Chief, Historic Restoration

Robert H. Norton Vacant

DEPARTMENT OF PUBLIC PROGRAMS

Assistant Director for Public Programs Design Editor Education Intern Program Coordinator Performance Director Production Director Director, Program in Black American History Public Information Officer Publications Officer

Lonn Taylor Crimilda Pontes Robert Selim Elizabeth Sharpe Mary Dyer James Weaver Harold Closter

Bernice Reagon Vacant Camellia Taiwo

OFFICE OF THE REGISTRAR

Registrar Assistant Registrar

Martha Morris Shannon Katherine P. Spiess

DEPARTMENT OF THE HISTORY OF SCIENCE AND TECHNOLOGY

Chairman Deputy

Arthur P. Molella William L. Withuhn

Division of Agriculture and Natural Resources

Curators

James C. Daniel George T. Sharrer Division of Armed Forces History

Curators Edward C. Ezell

Donald E. Kloster Harold D. Langley

Historian Curator Emeritus James Hutchins Philip Lundeberg

Division of Electricity and Modern Physics

Curators Bernard Finn Paul Forman

Division of Engineering and Industry

Curators Tom D. Crouch

Carlene E. Stephens

Robert M. Vogel

Division of Mathematics

Curator Uta C. Merzbach

Division of Medical Sciences

Curators Audrey B. Davis

Ramunas A. Kondratas

Barbara Melosh

Division of Physical Sciences

Curators Deborah J. Warner

Jon B. Eklund

Division of Transportation

Curators William L. Withuhn
Senior Historian John H. White

Senior Historians Office

Historian Emeritus Brooke Hindle
Senior Scientific Scholar Robert P. Multhauf

Senior Historian Nathan Reingold

Technology and Culture

Editor Robert Post

DEPARTMENT OF SOCIAL AND CULTURAL HISTORY

Chairman Gary B. Kulik Vice Chairman Susan H. Myers

Afro-American Index Project

Project Manager Fath Davis Ruffins

Division of Ceramics and Glass

Curator Susan H. Myers

Division of Community Life

Curators Richard E. Ahlborn Carl H. Scheele

Division of Costume

Curator Claudia B. Kidwell
Curator Emeritus Anne W. Murray

Division of Domestic Life

Curators Anne C. Golovin Rodris C. Roth

Barbara C. Smith

Division of Graphic Arts

Curators Elizabeth M. Harris

Helena C. Wright

Division of Musical Instruments

Curators John T. Fesperman

Cynthia A. Hoover John E. Hasse Horace Boyer

Division of Photographic History

Curator Eugene Ostroff

Division of Political History

Curators Edith P. Mayo Keith E. Melder

Curator Emeritus Margaret B. Klapthor

Division of Textiles

Curator Rita J. Adrosko

NATIONAL MUSEUM OF NATURAL HISTORY

Director

Associate Director Acting Director Acting Associate Director

Assistant Director for
Special Projects
Assistant Director for
Programs
Special Assistant to the
Director
Special Assistant to the
Associate Director
Director, Quincentenary Programs

Writer-Editor Administrative Officer Administrative Assistant Administrative Specialist

Management Analyst
Assistant Director for
Education
Assistant Director for the
Automatic Data Program
Assistant Director for Exhibits
Assistant Director for
Collections Management
Registrar
Building Manager
Supervisory Museum Specialist,
Scanning Electron Microscope
Laboratory

ANTHROPOLOGY

Chairman
Administrative Specialist
Collections Manager
Conservation Laboratory
Public Information Specialist

Robert S. Hoffmann (Appointed April 1986) James C. Tyler James C. Tyler Stanwyn G. Shetler (Appointed August 1986)

Catherine J. Kerby

Stanwyn G. Shetler

Ruth O. Selig

Jerome A. Conlon
Herman J. Viola
(Appointed June 1986)
Thomas R. Harney
Mary Rakow Tanner
Noreen Dinndorf
Penelope K. Gift
(Appointed June 1986)
Marsha Sitnik

Joan C. Madden

T. Gary Gautier
Laurence P. O'Reilly
Jenet Gomon (Appointed
December 1985)
Margaret A. Santiago
Edward McCoy

Walter R. Brown

Adrienne L. Kaeppler Penelope K. Gift Candace Greene Carolyn L. Rose Ann Kaup

Handbook of North American Indians

General Editor
Managing Editor
Production Manager
Management Services Assistant
Anthropologist
Linguist
Librarian

William C. Sturtevant
R. H. Ives Goddard III
Diane Della-Loggia
Melvina Jackson
Joanna C. Scherer
R. H. Ives Goddard III
Lorraine H. Jacoby

Human Studies Film Archives

Director Assistant Director Adrienne L. Kaeppler Wendy A. Shay

National Anthropological Archives

Acting Director

Assistant Director

James R. Glenn (Appointed May 1986) Paula Fleming

Latin American Anthropology

Curator Associate Curator Expert Robert M. Laughlin William H. Crocker Betty J. Meggers

North American Anthropology

Curators

William W. Fitzhugh Bruce D. Smith Dennis J. Stanford William C. Sturtevant

Associate Curator

William L. Merrill

Old World Anthropology

Curators

Adrienne Kaeppler Ivan Karp William B. Trousdale Gus Van Beek

Associate Curators

Mary Jo Arnoldi

Paul Taylor

Physical Anthropology

Curators

J. Lawrence Angel Donald J. Ortner

Douglas H. Ubelaker

Associate Curator

Richard Potts

Linguistics

Curator

R. H. Ives Goddard III

Research Associates, Collaborators, and Affiliated Scientists

James M. Adovasio (Archeology) John Albanese (Geology) George Appell (Ethnology) Andrew Apter (Ethnology) Larry Banks (Archeology) Gillian Bentley (Physical Anthropology) Ava Berenstein (Linguistics) Michael D. Blakey (Physical Anthropology) Kathleen J. Bragdon (Linguistics) Alison S. Brooks (Archeology) Ernest S. Burch, Jr. (Archeology) Margaret Caldwell (Physical Anthropology) Henry B. Collins (Archeology) Aron Crowell (Archeology) Edith Dietze (Ethnology) Gloria Edynak (Physical Anthropology) John C. Ewers (Plains Ethnology) Don D. Fowler (Archeology) George Frison (Archeology) Bruno Frohlich (Physical Anthropology) Kathleen Gordon (Physical Anthropology) James Griffin (Archeology) Chris Hardin (Ethnology) Gary Haynes (Archeology) Brian Hesse (Archeology) John Homiak (Ethnology) Neil C. Hughes (Archeology) H. Edwin Jackson (Archeology) Bennie C. Keel (Archeology) Jennifer O. Kelley (Physical Anthropology) Richard T. Koritzer (Physical Anthropology)

JoAnne Lanouette (Education) Paulina Ledergerber (Archeology) Julio C. Melatti (Ethnology) Jerald T. Milanich (Archeology) Sidney Mintz (Ethnology) Jo Moore (Scientific Illustration) Chris Nagle (Archeology) Jill Neitzel (Ethnology) Stephen Potter (Archeology) Mary L. Powell (Physical Anthropology) Walter G. J. Putschar (Physical Anthropology) Bruce D. Ragsdale (Pathology) Leslie Rankin-Hill (Physical Anthropology) Jean-Loup Rousselot (Archeology) Lucile E. St. Hoyme (Physical Anthropology) Robert G. Schmidt (Geology) T. Dale Stewart (Physical Anthropology) Barbara Stuckenrath Russell Thornton (Physical Anthropology) Maurizio Tosi (Archeology) Mildred M. Wedel (Archeology and Ethnohistory) Waldo R. Wedel (Archeology) Pamela J. Wintle (Film Archives) Rita Wright (Physical Anthropology) Melinda Zeder (Zooarcheology)

BOTANY

Chairman Administrative Assistant Collections Manager

Senior Botanists

Mason E. Hale, Jr.

Phanerogams

Curators

Dan H. Nicolson Robert W. Read Stanwyn G. Shetler

Associate Curators

Robert B. Faden Vicki A. Funk

Ferns

Associate Curator

Grasses

Curator

Cryptogams

Curators

James N. Norris

Palynology

Curator

Mark M. Littler Nella F. Lloyd George F. Russell

Mark M. Littler

Laurence E. Skog Dieter C. Wasshausen John J. Wurdack

Marie-Helene Sachet (Deceased July 19, 1986)

David B. Lellinger

Thomas R. Soderstrom

Harold E. Robinson

Joan W. Nowicke

Plant Anatomy

Curator

Richard H. Eyde

Research Associates, Collaborators, and Affiliated Scientists

Katina Bucher (Algae) Jose Cuatrecasas (Flora of Tropical South America) Alva G. Day (Polemoniaceae) James A. Duke (Flora of Panama) Patricia M. Eckel (Mosses) F. Raymond Fosberg (Tropical Island Plants) Aaron Goldberg (Phanerogams) Charles R. Gunn (Seeds) Mark Edward Hay (Marine Algae) Otto Huber (Plant Ecology) Joseph H. Kirkbride, Jr. (Rubiaceae) Elbert L. Little, Jr. (Dendrology) Diane S. Littler (Marine Algae) Alicia Lourteig (Neotropical Botany) John C. Ogden (Marine Ecology)

Kittie F. Parker (Compositae) Duncan M. Porter (Phanerogams) Muriel E. Poston (Loasaceae) Clyde F. Reed (Phanerogams) Amy Y. Rossman (Fungi) Velva E. Rudd (Leguminosae) Edith E. B. Scott (Bryophyta) Walter Shropshire, Jr. (Plant Physiology) Lyman B. Smith (Flora of Brazil) Frans A. Stafleu (Phanerogams) William L. Stern (Plant Anatomy) Christopher E. Tanner (Marine Botanical Systematics) Phillip R. Taylor (Marine Botanical Ecology) Edward E. Terrell (Phanerogams) Egbert H. Walker (East Asian Flora)

ENTOMOLOGY

Chairman Collections Manager Senior Scientist Wayne N. Mathis Gary F. Hevel Karl V. Krombein

Coleoptera

Curators

Terry L. Erwin

Paul J. Spangler

Hemiptera

Curator

Richard C. Froeschner

Hymenoptera

Senior Scientist Associate Curator Karl V. Krombein Ronald J. McGinley

Lepidoptera

Curators

John M. Burns

Associate Curator

Don R. Davis

Robert K. Robbins

Myriapoda and Arachnida

Associate Curator

Jonathan A. Coddington

Neuropteroids and Diptera

Curators

Oliver S. Flint, Jr.

Wayne N. Mathis

Research Associates, Collaborators, and Affiliated Scientists

Joachim Adis (Coleoptera) Annette Aiello (Lepidoptera) Donald W. Anderson (Colsoptera) Edward W. Baker (Mites) S. W. T. Batra (Hymenoptera) S. Franklin Blanton (Diptera) Barnard Burks (Hymenoptera) Robert W. Carlson (Hymenoptera) J. F. Gates Clarke (Lepidoptera) Margaret Collins (Orthoptera) Jerry Coyne (Diptera) Hilary Crusz (Insects of Sri Lanka) K. C. Emerson (Mallophaga) John H. Fales (Lepidoptera) Douglas C. Ferguson (Lepidoptera) Richard H. Foote (Diptera) John G. Franclement (Lepidoptera) Raymond J. Gagne (Diptera)
Robert D. Gordon (Coleoptera) E. Eric Grissell (Hymenoptera) William L. Grogan, Jr. (Diptera)
Ashley B. Gurney (Orthoptera) Ralph E. Harbach (Diptera) Bruce A. Harrison (Diptera) Thomas J. Henry (Hemiptera) John B. Heppner (Lepidoptera)

Ronald W. Hodges (Lepidoptera) W. L. Jellison (Mites, Ticks) James E. Keirans (Ticks) John M. Kingsolver (Coleoptera) Lloyd V. Knutson (Diptera) James P. Kramer (Homoptera) Paul M. Marsh (Hymenoptera) Arnold S. Menke (Hymenoptera) Douglass R. Miller (Homoptera) Scott E. Miller (Microlepidoptera) Carl F. W. Muesebeck (Hymenoptera) David F. Nickle (Orthoptera) Paul A. Opler (Lepidoptera) David L. Pearson (Coleoptera) Robert V. Peterson (Diptera) Kenelm W. Philip (Lepidoptera) Robert W. Poole (Noctuidae) George W. Rawson (Lepidoptera) Mary Livingston Ripley (General Entomology) Louise M. Russell (Homoptera) Curtis W. Sabrosky (Diptera) Michael E. Schauff (Hymenoptera) Jay C. Shaffer (Microlepidoptera) Sunthorn Sirivanakarn (Diptera) Robert L. Smiley (Mites)

David R. Smith (Mites)
Theodore J. Spilman (Coleoptera)
George C. Steyskal (Diptera)
Manya B. Stoetzel (Homoptera)
F. Christian Thompson (Diptera)
Robert Traub (Siphonaptera)
Katsuji Tsuneki (Hymenoptera)

Hayo H. W. Velthuis (Hymenoptera)
Ronald A. Ward (Medical Entomology)
Richard E. White (Coleoptera)
Donald R. Whitehead (Coleoptera)
Willis W. Wirth (Diptera)
David Wooldridge (Coleoptera)

INVERTEBRATE ZOOLOGY

Chairman

Chairman

Collections Manager Administrative Assistant

Crustacea

Curators

J. Laurens Barnard Thomas E. Bowman Roger F. Cressey C. W. Hart, Jr.

Echinoderms and Lower Invertebrates

Curators

Frederick M. Bayer Stephen D. Cairns

Mollusks

Curators

Richard S. Houbrick

Associate Curators

M. G. Harasewych
(Appointed October 1985)

Clyde F. E. Roper (Term ended November 1985) Roger F. Cressey (Appointed November 1985) Roland H. Brown Martha V. Jovnt

Robert P. Higgins Brian F. Kensley Louis S. Kornicker Raymond B. Manning

David L. Pawson Klaus Ruetzler

Clyde F. E. Roper

Robert Hershler
(Appointed September 1985)

Worms

Curators

Kristian Fauchald W. Duane Hope

Meredith L. Jones Mary E. Rice

Registry of Tumors in Lower Animals

Director Microbiologist

Biological Lab Technician Biological Research Technician Biological Lab Technician

Research Assistant Museum Specialist John Harshbarger
Sing Chen Chang
(Retired July 1986)
Jennifer B. Clark
Linda Deck
Kathy Price
(Appointed January 1986)
Marilyn Slatick
Phyllis Spero

Research Associates, Collaborators, and Affiliated Scientists

J. Bruce Bredin
Fenner A. Chace, Jr.
(Emeritus Zoologist)
Steven Chambers
Elizabeth Chornesky
Joan D. Ferraris
Stephen J. Gardiner
Terrence M. Gosliner
Horton H. Hobbs, Jr.
(Emeritus Zoologist)
Lipke B. Holthuis
Roman Kenk
J. Ralph Lichtenfels
Patsy McLaughlin
Charles G. Messing

Isabel Perez-Farfante (Canet) Esther C. Peters Richard E. Petit Marian H. Pettibone (Emeritus Zoologist) Anthony J. Provenzano, Jr. Harald A. Rehder (Emeritus Zoologist) Janet W. Reid I. G. Sohn Ronald B. Toll Paul N. Turner Geerhart J. Vermeij Gilbert L. Voss Austin B. Williams David K. Young Vassil N. Zlatarski

MINERAL SCIENCES

Chairman Administrator

John E. Miller

Katherine Muzik

Robert F. Fudali Roberta Lynn Ellington

Meteorites

Curator Associate Curator Geograpist Roy S. Clarke, Jr. Glenn J. MacPherson Kurt Fredriksson

Mineralogy

Curator Associate Curator Crystallographer John Sampson White Jeffrey Post Daniel E. Appleman

Petrology and Volcanology

Curators

Richard S. Fiske William G. Melson Tom Simkin

Associate Curator

Sorena Sorensen

Physical Sciences Laboratory

Chemists

Eugene Jarosewich

Joseph A. Nelen

Electronics Technician

James E. Collins

Scientific Event Alert Network

Museum Specialist

Lindsay R. McClelland

Museum Technicians

Elizabeth Nielsen

Emily Wegert

Research Associates, Collaborators, and Affiliated Scientists

Vagn F. Buchwald (Meteorites)
William C. Buell IV (Volcanology)
Cathy Busby-Spera (Petrology)
Gary R. Byerly (Petrology)
Felix Chayes (Petrology and Volcanology)
Robert T. Dodd (Meteorites)
John Filson (Petrology and Volcanology)
Michael Fleischer (Mineralogy)
Martin Flower (Petrology
and Volcanology)

Edward Henderson (Meteorites)
Peter Levens (Mineralogy)
Brian H. Mason (Meteorites)
Paul B. Moore (Mineralogy)
Debra S. Stakes (Petrology
and Volcanology)
Geoffrey Thompson (Petrology
and Volcanology)
Othmar T. Tobisch (Petrology
and Volcanology)

PALEOBIOLOGY

Chairman
Curator Emeritus
Administrative Assistant
Collections Manager
Deputy Collections Manager
Paleobiological Information
Specialist
Scientific Illustrator
Vertebrate Paleontology
Preparation Laboratory,
Supervisor

Ian G. Macintyre
G. Arthur Cooper
Betty M. Lomax
Frederick J. Collier
Jann W. M. Thompson

Raymond T. Rye II Mary A. Parrish

Arnold D. Lewis

Senior Scientists

Richard H. Benson Richard E. Grant

Daniel J. Stanley

Geologists

Ian G. Macintyre James F. Mello

Kenneth M. Towe

Curators

Walter H. Adey Martin A. Buzas Alan H. Cheetham Robert J. Emry Nicholas Hotton III Francis M. Hueber Jack W. Pierce Clayton E. Ray Thomas R. Waller

Associate Curators

Anna K. Behrensmeyer William A. DiMichele

Scott L. Wing

Research Associates, Collaborators, and Affiliated Scientists

Jean M. Berdan William A. Berggren Raymond L. Bernor Arthur J. Boucot Sankar Chatterjee Anthony G. Coates G. Arthur Cooper Josephine W. Cooper Stephen J. Culver Daryl P. Domning Raymond C. Douglass J. Thomas Dutro, Jr. Ralph E. Eshelman Jerzy A. Federowski Robert M. Finks Frank A. Garcia Richard R. Graus McKenzie Gordon, Jr. Peter C. Griffith Peter J. Harmatuk Jessica A. Harrison Leo J. Hickey S. Taseer Hussain Carl F. Koch Kenneth E. Lohman Andres Maldonado John N. Malinky Sergius H. Mamay

Robert B. Neuman William A. Oliver, Jr. Lisa E. Osterman David B. Packer Thomas F. Phelan John Pojeta, Jr. Roy H. Reinhart Charles A. Repenning Kenneth D. Rose Bruce Runnegar William J. Sando David E. Schindel Judith Schneider Vincent P. Schneider R. Craig Shipp Frederick J. Siegle Elwyn L. Simmons Judith Skog Roberta K. Smith-Everenden Norman F. Shol I. Gregory Sohn Donald Spoon George D. Stanley, Jr. Steven M. Stanley Phillip Sze Frank C. Whitmore. Jr. Druid Wilson Ellis L. Yochelson

VERTEBRATE ZOOLOGY

Chairman Collections Managers

Administrative Assistant

Fishes

Curators

Robert H. Gibbs, Jr. Victor G. Springer

Associate Curators

G. David Johnson

W. Ronald Heyer
J. Phillip Angle
Susan L. Jewett
Jeffrey T. Williams
Anna L. Datcher

Stanley H. Weitzman

Richard P. Vari

Amphibians and Reptiles

Curators

W. Ronald Heyer

George R. Zug

Birds

Curators

Storrs L. Olson

Richard L. Zusi

Assistant Curator

Gary R. Graves

Mammals

Curators

Charles O. Handley, Jr.

James G. Mead

Richard W. Thorington, Jr.

Associate Curator

Michael D. Carleton

Office of the Secretary Emeritus

Secretary Emeritus Special Assistant

Museum Specialist

S. Dillon Ripley Adele Y. Issa Bruce M. Beehler

Research Associates, Collaborators, and Affiliated Scientists

John W. Aldrich (Birds)

John S. Ash (Birds)

Richard C. Banks (Birds)

John C. Barber (Birds)

Bruce M. Beehler (Birds)
William Belton (Birds)

Gregory D. Bentz (Birds)

Michael A, Bogan (Mammals)

Heraldo Britski (Fishes)

Eleanor D. Brown (Birds)

Robert L. Brownell, Jr. (Mammals)

John Cadle (Amphibians and Reptiles)

Bruce B. Collette (Fishes)

C. Kenneth Dodd, Jr. (Amphibians and Reptiles)

Andrzej Elzanowski (Birds)

Louise H. Emmons (Mammals)

Robert K. Enders (Mammals)

Carl H. Ernst (Amphibians and

Reptiles)

Alan Feduccia (Birds)

Sara V. Fink (Fishes)

William L. Fink (Fishes)

Mercedes S. Foster (Birds)

Thomas H. Fritts (Amphibians and

Reptiles)

Jeffery Froehlich (Mammals) Alfred L. Gardner (Mammals) J. Whitfield Gibbons (Amphibians and Reptiles) Michael Goulding (Fishes) Richard Highton (Amphibians and Reptiles) Peter W. Houde (Birds) Morton and Phyllis Isler (Birds) George J. Jacobs (Amphibians and Reptiles) Frances C. James (Birds) Gordon L. Kirkland, Jr. (Mammals) Irving L. Kornfield (Fishes) William H. Krueger (Fishes) Roxie C. Laybourne (Birds) John M. Legler (Amphibians and Reptiles) Roy W. McDiarmid (Amphibians and Reptiles) Antonio Machado-Allison (Fishes) Francisco Mago-Leccia (Fishes) Joe T. Marshall (Birds) Linda R. Maxson (Amphibians and Reptiles) Naercio Menezes (Fishes) Joseph C. Mitchell (Amphibians and Reptiles) Richard M. Mitchell (Mammals) Ralph S. Palmer (Birds) Lynne R. Parenti (Fishes) William F. Perrin (Mammals) Allan R. Phillips (Birds)

Gregory K. Pregill (Amphibians and Reptiles) John E. Randall (Fishes) G. Carleton Ray (Mammals) Randall R. Reeves (Mammals) S. Dillon Ripley (Birds) C. Brian Robbins (Mammals) Carol Ruckdeschel (Amphibians and Reptiles) Alan H. Savitzky (Amphibians and Reptiles) Albert Schwartz (Amphibians and Reptiles) Norman J. Scott, Jr. (Amphibians and Reptiles) William F. Smith-Vaniz (Fishes) David W. Steadman (Birds) Kenneth J. Sulak (Fishes) Stephen G. Tilley (Amphibians and Reptiles) James C. Tyler (Fishes) Joseph P. Ward (Amphibians and Reptiles) Richard J. Wassersug (Amphibians and Reptiles) Marilyn Weitzman (Fishes) John S. Weske (Birds) Claudia P. Wilds (Birds) E. O. Wiley (Fishes) James D. Williams (Fishes) Don E. Wilson (Mammals)

SMITHSONIAN OCEANOGRAPHIC SORTING CENTER

Director Administrative Assistant

Ronald H. Pine (Mammals)

Leslie W. Knapp Patricia K. Buckley

David B. Wingate (Birds)

Marine Biologists

Frank D. Ferrari Betty J. Landrum Ernani G. Menez

SMITHSONIAN MARINE STATION AT LINK PORT

Scientist-in-Charge Administrative Officer Station Manager Mary E. Rice Lorraine Brouillard Hugh Reichardt

Research Assistants

William D. Lee Sherry Anne Petry Julianne Piraino

MUSEUM SUPPORT CENTER

Director
Administrative Assistant
Collections Coordinator
Data Manager
Shipping Officer
Facility Manager

U. Vincent Wilcox Patti B. Young Wendy C. Jessup Joan B. Andrews James Lee Charles E. Dunn

NATIONAL PORTRAIT GALLERY

Director
Assistant Director for Collections
Assistant Director for History and
Public Programs
Executive Officer
Curator of Painting and Sculpture
Curator of Exhibitions
Associate Curators of Painting and
Sculpture

Curator of Prints
Curator of Photographs
Curator of Education
Editor of Publications
Chief, Design and Production
Keeper, Catalog of American
Portraits
Editor of the Charles Willson
Peale Papers and Historian of
American Culture
Librarian
Conservator
Senior Photographer
Registrar
Public Affairs Officer

Alan Fern Carolyn K. Carr

Marc Pachter Barbara A. Hart Robert G. Stewart Beverly J. Cox

Monroe Fabian
Ellen Miles
Wendy Wick Reaves
William F. Stapp
Kenneth Yellis
Frances S. Wein
Nello Marconi

Richard K. Doud

Lillian B. Miller Cecilia Chin Cindy Lou Molnar Eugene Mantie Suzanne Jenkins Sandra Westin

OFFICE OF EXHIBITS CENTRAL

Director
Assistant Director, Chief of
Production
Assistant Director, Chief of
Design and Editing
Administrative Officer

Supervisor, Model Shop Supervisor, Fabrication Unit Supervisor, Graphic Production

OFFICE OF HORTICULTURE

Director
Administrative Officer
Coordinator of Horticultural Services
Foreman, Grounds Management Division
Manager, Greenhouse-Nursery Division
Museum Specialist

OFFICE OF MUSEUM PROGRAMS

Director
Assistant Director
Audiovisual Program Coordinator
Museum Program Specialist
Museum Programs Specialist
Project Coodinator, Kellogg
Grant Project

OFFICE OF THE REGISTRAR

Director
Assistant to the Director
Office Manager

James A. Mahoney (retired 6/3/86) John Widener (retired 3/31/86) Walter G. Sorrell (appointed 5/25/86)

Karen Fort
William Clark (retired 1/3/86)
Eva Goodwin (appointed 6/30/86)
Benjamin Snouffer
Kenneth R. Clevinger
James A. Speight Jr.

James R. Buckler Peter J. Nerret Lauranne C. Nash Kenneth Hawkins August A. Dietz IV Kathryn Meehan

Jane R. Glaser
Nancy J. Fuller
Laura T. Schneider
Patricia P. Barrows
Bruce C. Craig
Philip D. Spiess II

Mary E. Case Joseph L. Wiley Freida D. Hancock

SMITHSONIAN INSTITUTION TRAVELING EXHIBITION SERVICE

Director Associate Director Assistant Director for Program Assistant Director for Administration Assistant Director for Exhibition Development Senior Exhibition Coordinator Head Registrar Public Relations Director Curator of Education

Publications Director

Peggy Loar Claire Fronville Eileen Rose

Linda Bell

Anne Gossett

Martha Cappelletti Mary Jane Clark Deborah Bennett Myriam Springuel Andrea Stevens

OFFICE OF THE ASSISTANT SECRETARY FOR PUBLIC SERVICE

Assistant Secretary Executive Assistant Special Assistant Special Assistant Administrative Officer Special Advisor for Telecommunications

Ralph Rinzler James C. Early Mary Lynne McElroy Jeffrey T. LaRiche Andrew W. McCoy

Thomas H. Wolf

OFFICE OF THE COMMITTEE FOR A WIDER AUDIENCE

Director

Vera H. Hyatt

OFFICE OF ELEMENTARY AND SECONDARY EDUCATION

Director Museum Education Specialist Coordinator for Special Education

Workshop Coordinator

Betsy Eisendrath

Janice Majewski workshop Coordinator Career Awareness Coordinator Career Awareness Coordinator Montrose Cones
Career Awareness Education Specialist Brenda Brown
Program Assistant John Leonard

Ann Bay Thomas E. Lowderbaugh

OFFICE OF FOLKLIFE PROGRAMS

Director
Deputy Director
Festival Director
Senior Ethnomusicologist
Folklorists

Administrative Officer
Festival Services Manager
Program Specialist
Designer
Acting Archivist
Audio Visual Production Assistant

Peter Seitel
Richard Kurin
Diana Parker
Thomas Vennum, Jr.
Alicia Gonzalez
Marjorie Hunt
Phyllis May-Machunda
Frank Proschan
Nicholas Spitzer
Jewell Dulaney
Barbara Strickland
Arlene Liebenau
Daphne Shuttleworth
Peter Magoon
Guha Shankar

OFFICE OF PUBLIC AFFAIRS

Director
Assistant Director
Executive Officer
Administrative Services Coordinator
Public Affairs Specialists:
Mary Combs David Maxfield
Johnnie Douthis Ingrid Mendelsohn
Kathryn Lindeman Victoria Moeser
Editor

Alvin Rosenfeld*
Madeleine Jacobs
Eileen Hall
Carolyn Amundson

William G. Schulz Linda St.Thomas Lilas Wiltshire Rachel Sears Margaret Langrall John Barrat

Writer-Editor

OFFICE OF SMITHSONIAN SYMPOSIA AND SEMINARS

Director Wilton S. Dillon Associate Director Carla M. Borden

^{*}Retired September 3, 1986

OFFICE OF TELECOMMUNICATIONS

Director
Associate Director
Director of Special Projects
Audio/Visual Production Specialists

TV Production Specialist Motion Picture Production Specialist Radio Production Specialists

Radio Production/Marketing Specialist Administrative Officer Nazaret Cherkezian
Paul Johnson
Karen Loveland
Carolyn Hopewell
Lee Cioffi
John P. Meehan
Jean B. Quinnette
Peter R. C. Erikson
John W. Hiller
Jesse E. Boggs
John Tyler
Denise E. Freeland
Charlotte Brown

SMITHSONIAN INSTITUTION PRESS

Director
Deputy Director
Financial Manager
Marketing Consultant
Administrative Officer

University Press Division

Assistant Director and Managing Editor Senior Science Editor Editor, Special Projects Acquisitions Editors

Chief Manuscript Editor
Series Publications Supervisor
Production
Design

Direct Mail Book Division

Editor-in-Chief Senior Editor

Recordings Division

Associate Producer
Editorial and Design Coordinator

Felix C. Lowe
Vincent L. MacDonnell
John R. Ouellette
William Kelty
Dorothy Blaska

Maureen R. Jacoby Edward F. Rivinus Martin Williams Daniel H. Goodwin Kathy Ann Kuhtz Ruth W. Spiegel Barbara J. Spann Kathleen Brown Alan Carter

Patricia Gallagher Alexis Doster III

Margaret Robinson
Jane Sapp

SMITHSONIAN MAGAZINE

Editor Executive Editor

Members, Board of Editors:
Caroline Despard
Jim Doherty
Timothy Foote
Bennett Schiff

Publisher
Associate Publisher, Advertising
Associate Publisher, Administration
Director of Circulation
Director of Production
Consultants to the Magazine

Don Moser Ralph Backlund

Nancy Seaman Paul Trachtman John P. Wiley, Jr.

Joseph J. Bonsignore Thomas H. Black Carey O. Randall John O'Donnell E. Cherry Doyle Edward K. Thompson Anne Keating

VISITOR INFORMATION AND ASSOCIATES' RECEPTION CENTER

Director
Deputy Director, Information Services
Manager, Information Resources
Division
Acting Manager, Staff, Volunteer, and
Intern Services Unit
Manager, Public Inquiry Mail Unit
Manager, Telephone Information
Program
Coordinator, Group Information
Services
Coordinator, Information Outreach
Program
Training Coordinator
Manager, Central Services

Mary Grace Potter Gretchen Jennings

Maria Heasly

Nancy Hinton Debora Fletcher

Cordelia Benedict

Julia Robertson

Molly Campbell Carolyn Clampitt Bee Gee Livsey

ADMINISTRATION

Assistant Secretary Planning Officer Special Assistant Ombudsman John F. Jameson Robert L. Farrell Elizabeth Beuck Derbyshire Chandra P. Heilman

OFFICE OF ARCHITECTURAL HISTORY AND HISTORIC PRESERVATION

Director Assistant Director Cynthia R. Field James M. Goode

OFFICE OF CONGRESSIONAL LIAISON

Director Congressional Liaison Specialist Margaret C. Gaynor Carey M. Wilkins

CONTRACTS OFFICE

Director

Elbridge O. Hurlbut

OFFICE OF DESIGN AND CONSTRUCTION

Director Deputy Director Acting Chief, Planning Division Chief, Design Division Chief, Construction Division Administrative Officer

Phillip K. Reiss David L. Slingerland Harold J. Rombach William L. Thomas Thomas P. Myers James N. Guandolo

OFFICE OF EQUAL OPPORTUNITY

Director Program Manager, Accessibility Program Manager, Complaints Program Manager, Education Program Manager, Affirmative Action

Will Douglas, Jr. Diane Cook-Lee Robert L. Osborne Shirley Whitfield-Epps John B. Taylor

OFFICE OF FACILITIES SERVICES

Director

Richard L. Siegle

OFFICE OF INFORMATION RESOURCE MANAGEMENT

Director Deputy Director Manager, Information System Division Manager, Computer and Communications Div. Manager, Information Services Division Manager, Information Management Division

Richard H. Lytle David A. Bearman James Crockett George Anderson Dante Piacesi Stephen Toney

MANAGEMENT ANALYSIS OFFICE

Director Assistant Director Chief, Operations

John G. Motheral James M. Young Iris Pickens

OFFICE OF PERSONNEL ADMINISTRATION

Assistant Director for Operations Assistant Director for Policy and Programs Barry Pierce Benefits Officer Labor Relations Officer

Howard Toy Peter McSwain Wendell Mickle Mancy Johns

OFFICE OF PLANT SERVICES

Director Assistant Director, Physical Plant Programs Assistant Director, Administration and Support Services Chief. Utilities Operations Chief, Crafts Chief, Industrial Engineering Chief, Communications and Transportation John L. Moreci

Michael R. League

William G. Wells

W. Scott Miller Lawrence D. Stuebing William A. Adams Michael J. Sofield

OFFICE OF PRINTING AND PHOTOGRAPHIC SERVICES

Director Deputy Director Production Control Officer Chief, Special Events/Photography Branch Richard Hofmeister Chief, NASM Branch Chief, NMNH Branch Chief, Services Branch Chief. Color Branch Chief. Duplicating Branch

James H. Wallace, Jr. Lorie H. Aceto Mary Ellen McCaffrey Dale Hrabak Victor Krantz Roberta Diemer Joe A. Goulait Herman Thompson

OFFICE OF PROGRAMMING AND BUDGET

Director Assistant Director, Federal Funds Assistant Director, Trust Funds

Mancy D. Suttenfield Mary J. Rodriguez Jack D. Zickafoose

OFFICE OF PROTECTION SERVICES

Director Deputy Director Administrative Officer Chief, Protection Service Chief, Security Systems Division Chief, Security Services Division Medical Officer Security Officer, Cooper-Hewitt

Robert B. Burke. Jr. G. Clifford Boocks Robert D. Seabolt Jay W. Chambers Barton B. Rinehart Thomas W. Bresson J. Andrew Armer, M.D. Luis A. Palau

OFFICE OF SAFETY PROGRAMS

Director

Edward R. Sniechoski

OFFICE OF SPECIAL EVENTS

Director Special Event Coordinators

Barbara Spraggins Edmund B. Anderson Kathleen A. Bauer Brigit Bush

OFFICE OF SUPPLY SERVICES

Director
Deputy Director

Robert P. Perkins John W. Cobert

OFFICE OF TRAVEL SERVICES

Director Travel Assistant Judith Petroski Carol P. Ailes

DIRECTORATE OF INTERNATIONAL ACTIVITIES

Director
Deputy Director
Special Assistant
Program Staff

John E. Reinhardt Gretchen Gayle Ellsworth Margaret P. Anderson Edward W. Bastian Cheryl B. LaBerge Mary S. McCutcheon Anne E. Peret

Office of Publications Exchange

Acting Manager Management Assistant Richard T. Conroy Thomas J. Matthews

Office of Service and Protocol

Director
Deputy Director
International Affairs Specialist
International Liaison

Kennedy B. Schmertz Richard T. Conroy Saundra T. Thomas Bryan W. J. LeMay

Quincentenary Planning

Coordinator Program Assistant Magali M. Carrera Lisa K. Minichiello

Special Foreign Currency Program

Program Manager Program Assistant Francine C. Berkowitz L. Ernelle Ross

OFFICE OF MEMBERSHIP AND DEVELOPMENT

Director
Deputy Director
Development Officers

James McK. Symington E. Jeffrey Stann Donna B. Ari

Salvatore G. Cilella, Jr.

Diana D. Duncan Arthur W. Gardner Bonnie Krench Michael Syphax Susan J. Kalčik

Research Coordinator

NATIONAL ASSOCIATE PROGRAM

Director Assistant Director Jacqueline Austin Joseph Carper

Program Coordinator for the Women's Committee

Paula Duncan

Lecture and Seminar Program

Program Manager Senior Program Coordinators Charlene James-Duguid Amy Kotkin MaryBeth Mullen

Contributing Membership

Program Manager Program Specialist Program Coordinator Fern Segerlind William Stewart Jill Elisofon

Associates Travel

Program Manager, Domestic Study Tours Program Manager, Foreign Study Tours

Prudence Clendenning

Barbara Tuceling

RESIDENT ASSOCIATE PROGRAM

Director
Associate Director for Programming
Assistant Director for Administration
Assistant Director for Courses
Senior Program Coordinators

Program Coordinators

Art Director
Public Information Specialist/Editor
Assistant Editor

Publicist
Membership Coordinator
Assistant Membership Coordinator
Registration Manager
Assistant Registration Manager
Volunteer Coordinator

Janet W. Solinger Edmund H. Worthy, Jr. Michael W. Cassidy Paul J. Edelson Roslyn Beitler Moya B. King Melinda Y. Frye/Nancy Rosnow Marcus L. Overton Anna Caraveli Penelope P. Dann Karen M. Gray Elizabeth H. McClung Susan L. Swarthout Katherine Wood Margaret V. Lee Karen R. Sagstetter Terence Winch/Kathryn Stafford Catherine J. Cole Jeanne B. George Claudette E. Moore Marjorie L. Walker Xenia S. Arnelle Elinor K. Emlet

UNDER SEPARATE BOARDS OF TRUSTEES

JOHN F, KENNEDY CENTER FOR THE PERFORMING ARTS

Roger L. Stevens, Chairman Marta Istomin, Artistic Director

Development

Jillian H. Poole, Director Richard W. Bauer, Deputy Director Barbara A. Hall, Associate Director Ronald T. Lambert, Associate Director

Finance

Clifton B. Jeter, Director John A. Berg, Controller

Operations

Geraldine M. Otremba, Director

Public Affairs and Marketing

Laura Longley, Director
Tiki Davies, Media Relations Director
John H. McAuliffe, Marketing Director
Joanne B. Steller, Advertising & Promotions Director

Special Events

Charlotte Woolard, Director

Theaters

Alan C. Wasser, Consultant

Cultural Diversity Affairs

Archie L. Buffkins, Director

Education Program

Jack W. Kukuk, Director
David R. Humphrey, Alliance for Arts Education
Carole C. Sullivan, Programs for Children and Youth
David Young, American College Theater Festival

Friends of the Kennedy Center

Thomas J. Mader, Executive Director

National Symphony Orchestra

Stephen Klein, Executive Director Allison B. Vulgamore, Manager

National Park Service

The Kennedy Center building is secured and partially maintained as a Presidential memorial by the National Park Service.

Donald Hodel, Secretary, U.S. Department of the Interior William Penn Mott, Jr., Director, National Park Service Manus J. Fish, Regional Director, National Capital Region E. O. "Skip" Larson, General Manager, Kennedy Center

NATIONAL GALLERY OF ART

CFFICE OF THE PRESIDENT President

Vice President

John R. Stevenson Carlisle H. Humelsine

OFFICE OF THE DIRECTOR Director Special Assistant Executive Assistant

J. Carter Brown Robert Bowen Angela LoRe

OFFICE OF THE DEPUTY DIRECTOR Deputy Director Chief, Education Department Russell Sale Editor Chief of Exhibition Programs D. Dodge Thompson Chief Librarian Chief, Photographic Laboratory Richard Amt Head, Photographic Services Ira A. Bartfield
Head, Extension Programs Ruth R. Perlin
Head, Art Information Service Elise V. H. Ferber Curator of Photographic Archives Chief, Department of Design and Installation Managing Curator, Records and Loans Registrar Head, Department of Loans and National Lending Service Assistant to the Deputy

John Wilmerding Frances Smyth (vacant)

Ruth Rowe Philbrick

Gaillard F. Ravenel

Suzannah Fabing Mary E. Suzor

Stephanie Belt

Carol Kelley

CURATORS

Director

Chief Curator Senior Curator, Curator of Prints and Drawings Prints and Drawings Curator of French Prints Curator of Italian Drawings Diane DeGrazia Curator of Contemporary Prints Ruth Fine Curators of Northern Renaissance Painting

Curator of Southern Renaissance Painting

Curator of Northern Baroque

Painting Painting
Curator of American Art Curator of Sculpture

Curator of Modern Painting Charles Stuckey Curator of Twentieth-Century

Chief of Conservation

Sydney J. Freedberg

Andrew C. Robison, Jr. H. Diane Russell

John O. Hand

David A. Brown

Arthur K. Wheelock Nicolai Cikovsky Douglas Lewis

Jack Cowart Ross M. Merrill OFFICE OF EXTERNAL AFFAIRS

External Affairs Officer
Special Events
Public Information

Corporate Relations

President's Office, Special Project, Patrons' Permanent

Fund Music Laura E. Smith

Elizabeth A. C. Weil

Joseph J. Krakora Genevra Higginson

Neill R. Heath

Laura E. Smith George Manos

OFFICE OF THE SECRETARY-GENERAL COUNSEL

Secretary-General Counsel Philip C. Jessup, Jr.

Associate Secretary-General

Counsel Elizabeth A. Croog
Assistant Secretary Kathryn K. Bartfield

Chief Archivist, Gallery

Archives Maygene Daniels

CENTER FOR ADVANCED STUDY IN THE VISUAL ARTS

Dean Henry A. Millon

Associate Dean Marianna S. Simpson

OFFICE OF THE TREASURER

Treasurer Daniel Herrick
Assistant Treasurer Michael W. Levine

OFFICE OF THE ADMINISTRATOR

Administrator Joseph G. English
Assistant Administrator George W. Riggs
Personnel Officer Michael B. Bloom
Acting Building Superintendent Alvia R. Campbell
Chief of Security Francis E. Verrier

READING IS FUNDAMENTAL. INC.

Chairman of the Board
President
Director of Special Projects
Director of Development
Director of Supplier and Organizational Relations
Director of Parent Services and Publications
Program Services Officer
Regional Program Coordinator
Subcontract and Data Retrieval Officer
Resource Coordination Specialist
Finance and Personnel Officer
Materials/Supplies Manager

Mrs. Elliot Richardson
Ruth Graves
Nancy Sullivan
Wade St. Clair
Barbara B. Atkinson
James Wendorf
Jessie L. Lacy
Mary Chor
Don Perron
Harry Noles
Donna M. Wagley
Calvin L. McFadden
Gail Oerke
Victoria J. Heland

Writer/Editors

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

Director Deputy Director Associate Director and Chairman, European Institute Assistant Director for Development and Secretary, Asia Program Assistant Director for Administration and Finance Assistant Director for Fellowships and Coordinator, Program on History, Culture, and Society Executive Assistant to the Director Editor, Wilson Quarterly Librarian Publications Program Manager Special Assistant for Public Affairs Secretary, West European Program Acting Secretary, East European Program Secretary, Program on American Society and Politics Senior Program Associate, International Security Studies Program Secretary, Latin American Program Secretary, Kennan Institute for Advanced Russian Studies

James H. Billington Prosser Gifford

Samuel F. Wells, Jr.

Ronald A. Morse

Jon Yellin

Ann C. Sheffield Mernie Wright Weathers Peter Braestrup Zdenek V. David Elizabeth Dixon

George Liston Seay Michael Haltzel

George W. Hoffman

Michael J. Lacey

Robert Litwak Richard M. Morse

Peter B. Reddaway

Appendix 8

Donors to the Smithsonian Institution in Fiscal Year 1986

The Board of Regents and the Secretary of the Smithsonian Institution join with the entire staff in thanking all of the Institution's friends for their generous financial support and for their gifts to the collections. If perchance the name of any donor has been omitted from the following list, it is an inadvertence and in no way diminishes the Institution's gratitude. Many gifts were received from donors who prefer to remain anonymous; the Smithsonian wishes to thank them for their generosity.

NATIONAL ZOOLOGICAL PARK

Donors of Financial Support

Individuals

Anonymous
Ms. Gillian Cookson
Mrs. A. W. Holmberg
Mr. & Mrs. Philip B. Perrine
Ms. Michele M. Scanlon

Mrs. Robert V. Clarke, Jr. Robert W. Emeneckser, Sr. Mr. & Mrs. John A. McGuire Mrs. Robert D. van Roijen

Others

Audubon Park and Zoological Garden
Denver Zoological Foundation, Inc.
Geraldine R. Dodge Foundation
Kansas City Zoological Gardens
New England Aquarium
San Francisco Zoological Society
The Twentieth Centuary Club
World Wildlife Fund

Clark-Winchole Foundation
Eistophos Science Club
Hastings Pavement Co., Inc.
Los Angeles Zoo Association
New York Zoological Society
The Overbrook Foundation
Westmoreland Hills Garden Club
Zoological Society of Cincinnati

SMITHSONIAN INSTITUTION ARCHIVES

Individuals

Thomas E. Bowman: papers of Thomas E. Bowman J. Carter Brown: addition to the James Smithson Collection John Frederick Gates Clarke: papers of J. F. Gates Clarke Jennie Emlong: papers of Douglas Emlong Riccardo Giacconi: papers of Riccardo Giacconi Edward P. Henderson: papers of Edward P. Henderson Mark R. Jennings: Frederic Morton Chamberlain papers Raymond B. Manning: papers of Raymond B. Manning Brian H. Mason: papers of Brian H. Mason George M. Meiser, IX: Martin A. Gruber Photograph Collection Sarma Modali: addition to the papers of Charles G. Abbot Ellen J. Moore: papers of Ellen J. Moore Nathan Reingold: papers of Nathan Reingold Curtis W. Sabrosky: papers of Curtis W. Sabrosky Donald R. Shasky: papers of Donald R. Shasky Marie and Robert Schultz: papers of Myra Keen T. J. Spilman: papers of T. J. Spilman T. J. Spilman: papers of Harrison Gray Dyar Rose Ella Warmer: papers of Rose Ella Warmer A. Gilbert Wright: papers of A. Gilbert Wright Lawrence H. Walkinshaw: papers of Lawrence H. Walkinshaw Ellis L. Yochelson: papers of Ellis L. Yochelson

Institutions

American Association for Zoological Nomenclature: records
of the Association
American Society of Ichthyologists and Herpetologists: records
of the Society
American Ornithologists' Union: records of the Union
American Society of Zoologists: records of the Society
The Crustacean Society: records of the Society
Entomological Society of Washington: records of the Society
International Union of Directors of Zoological Gardens: records
of the Union
Society of Systematic Zoology: records of the Society

SMITHSONIAN INSTITUTION LIBRARIES

Donors of Financial Support

Dibner Fund, Incorporated

Donors to the Collections
Individual Donors

Thomas R. Adams: The Non-Cartographical Maritime Works.
Richard E. Ahlborn: Stern Jean. The Cross and the Sword, 1976.
Gail Altman: Walker, David A. C. Paterson of Cyrence, 1985.
Burton E. Ashley: Grenfell, Rev. George. The Upper Congo as a Waterway, 1902.

Gizachew Audualem: Ethiopia's Historic Route, 1984. Ethiopian Festivals, 1982.

Herbert Axelrod: Bleeker Pieter. Atlas Ichthyologique des Indes Orientales Neerlandaises, 1986.

Bohumila de Bechyne: Bechyne, Jan. <u>El Jeannelismo y la Evolucion</u>, 1980. Silvio Bedini: Bedini, Silvio. <u>Clockwork Cosmos: Bernardo Facini and the Farnese Planisferologio</u>, 1985.

Bruce M. Beehler: Beehler, Bruce M. and Finch, Brain W. Species--Checklist of the Birds of New Guinea, 1985.

Dana Bell: Stern, Robert C. Air War Over the Pacific, 1986.

Charles Berger: Roosevelt, Eleanor. This is My Story.

Don Berkebile: Whitman, Roger B. Motor-cycle Principles and the Light Car, 1914.

Roy G. Bettiens: Hinkler and History.

Nancy Echols Biggerstaff: Iskandar, Teuku. Kamus Dewan, 1970.

Poerwadarminta, W. J. S. Kamus Umum Bahasa Indonesia, 1976.

Klinkert, H.C. Nieuw Maleisch-Nederlandsch Woordenboek, 1930.

Thaib, M. Kamoes Bahasa Minangkabai Bahasa Melajoe--Riau, 1935.

Horne, Elinor Clark. Javanese - English Dictionary, 1974.

Wilkinson, R.J. A Malay - English Dictionary, 1932.

Cliff Bishop: Hawkins, Ian. Munster: The Way it Was, 1984.

Rhea C. Blue: Journal of the American Oriental Society, vol. 99, no. 1 and vols. 102-104.

Mike Blumenthal: Barber, H. The Aeroplane Speaks, 1917.

Marvin J. Bradburn: Twenty books from the International Textbook Company.

Dorothy Brewster: House and Garden, 1983-1985.

Susan Fifer Canby: Bulletin de l'Institut Océanographique, 1985.

William J. Carter: Dental Collectibles and Antiques.

François M. Catzeflis: Catzeflis, François M. Systématique Biochimique Taxonomie et Phylogenie des Musaraignes d'Europe (Soricidae Mammalia), 1984.

Robert P. Chapman: Chapman, Robert P. Pilot Fatigue - A Deadly Cover-Up, 1982.

- Betty Childs: McCall, Robert and Asimov, Issac. Our World in Space, 1974.
- Ki-Chul Choi: Nature of Kyonggi Province: Fresh-Water Fishes.
- Roy Clark: Shookalukov, U. A. Chaasie Na Milliard Let, 1984.
- Bruce Collette: Fernandez, Carlos Davila. <u>Tunidos y demas Escombridos</u> Mundiales, 1985.
- Henry B. Collins: Vihjalmur Stefansson and the Development of Arctic Terrestrial Science.
- Richard Cowan: photocopy of Mélanges Botaniques, 1855.
- G. B. Craighill, Jr.: Collection of Dr. Charles Lewis Gazin.
- Ronald I. Crombie: Whitaker, Romulus. <u>Common Indian Snakes</u>. A Field Guide, 1978.
 - Oldham, Jonathan C. and Smith, Hobart M. Laboratory
 - Anatomy of the Iguana, 1975.
 - Gunther, Albert. Catalogue of Colubrine Snakes in the Collection of the British Museum, 1971.
 - Townsend, Daniel S. The Adaptive Significance of Male Parental Care in a Neotropical Frog, 1984.
 - Woolbight, Lawrence L. Sexual Dimorphism in Body Size of the Subtropical Frog, Eleutherodactylus Coqui, 1985.
 - Vaz, Eduardo. Fundamentos da Historia do Instituto Butantan seu Desenvolvimento, 1949.
 - Important Fishes Trawled off Patagonia, 1986.
- A. D. Crown: Crown, A. D. <u>Dated Samaritan MSS</u>. <u>Some Codicological Implications</u>, 1986.
- Mary Kay Davies: The Laws of the United States of America, 1796.
- Bern Dibner: Kipnis, Igor and Dibner, Bern. Mozart and the Royal Society, 1985.
- Max C. Downes: Downes, Max C. Bibliography of Recent Crocodiliaus, 1985.
- Alain Dubois: Dubois, Alain. <u>Le Genre en Zoologie: Essai de</u> Systématique Théorique, 1985.
- Donald Duke: Frey, Robert L. <u>Northern Pacific Railway: Supersteam Era 1925-1945</u>, 1984.
- Terry Ehling: Bashe, Charles J. et al. IBM's Early Computers, 1986.
 - Pugh, Emerson W. Memories that Shaped and Industry, 1984.
 - Seibert, William McC. Circuits, Signals, and Systems, 1986.
 - Eckert, W. J. Punched Card Methods in Scientific Computation, 1984.
 - Babbage, Henry Prevost. Babbages's Calculating Engines, 1982.
 - Carpenter, B. E. A. M. Turing's Ace Report of 1946 and Other Papers, 1986.
 - Wilkes, Maurice V. et al. The Preparation of Programs for an Electronic Digital Computer, 1982.
 - Abelson, Harold et al. Structure and Interpretation of Computer Programs, 1985.
- Andrzej Elzanowski: Marz, Robert. <u>Gewoll-und Rupfungskunde</u>, 1969. Akker, L. M. Van Den. <u>An Anatomical Outline of the Spinal Cord of the Pigeon</u>, 1970.
- Steven C. Espenschied: Espenschied, Steven C. A History of the American Steam Calliope, 1986.
- Richard Eyde: Angelo, Ray. <u>Botanical Index to the Journal of Henry David Thoreau</u>, 1984.

J. S. Felton: Simons, David G. <u>Manhigh II</u>. <u>USAF Manned Balloon Flight</u> into the Stratosphere, 1959.

Simons, David G. Manhigh III. USAF Manned Balloon Flight into the Stratosphere, 1961.

Michael Fleischer: International Geology Review. Novve Dannye Minoral, 1985.

William Fitzhugh: Fauna: The Zoological Magazine. World Archaeology.

Oliver S. Flint, Jr.: Tachet, H. et al. <u>Introduction à l'Etude des Macroinvertebres des Eaux Douces</u>, 1984.

Kymanski, Kracimir Paskov. Fauna na Bulgariia, 1985.

Paul Forman: Killian, James R., Jr. The Education of a College President, 1985.

Crawford, Elizabeth. The Beginnings of the Nobel Institution. The Science Prizes, 1901-1915, 1984.

Boordieu, Pierre. La Distinction, 1979.

Benthall, Jonathan. Science and Technology in Art Today, 1972.

Strauss, Lewis L. Men and Decisions, 1963.

Sayen, Jamie. Einstein in America. The Scientist's Conscience in the Age of Hitler and Hiroshima, 1985.

Hendry, John. The Creation of Quantum Mechanics and the Bohr-Pauli Dialogue, 1984.

Keller, Phyllis. States of Belonging, 1979.

Davis, Douglas. Art and the Future, 1973.

Hoppock, Robert. Job Satisfaction, 1935.

Braun, Ernest and MacDonald, Stuart. Revolution in Miniature, 1982.

Raymond F. Fosberg: Gibridnye Gibiskusy, 1965.

Pratov, U. Marevye (Chenopodiaceae) ferganskoi doliny, 1970. Lugo, Ariel E. and Brown, Sandra. Watershed Management in the

Caribbean. Proceedings of the Second Workshop of Caribbean Foresters, 1984.

Bochantseva, Z. P. Tiulipany morfologiia tsitologiia i biologiia. Rusanov, F. N. Putevodutel Po Botanuch Eskomy Sadu an UZSSR, 1975.

Kojo Fosu: Fosu, Kojo. 20th Century Art of Africa, 1986.

Kurt Fredriksson: Lunar and Planetary Science XVII. Papers of the NASA Lunar and Planetary Institute, 1986.

Bevan French: Thirty-three publications in the field of Mineral Sciences. Vicki Funk: Atlas Regional Andino, 1982.

David P. Gamble: Gamble, David P. Gambian Items in the Adan E. Treganza Anthropology Museum, 1977.

Paul E. Garber: Smith, Richard K. Airships Akron and Macon, 1965.

Mary Lou Garbin: Gedye, Ione et al. Notes for a Short Course in Conservation, 1973.

Mary W. Garrison: Reports of the United States Commissioners to the Paris Universal Exposition, 1378, 1880.

Graziano Gasparini: Gasparini, Graziano. Las Fortificaciones del periodo Hispanico en Venezuela, 1985.

Ethel von Gerichten: The Philadelphia Grocer and Price List, 1876.

Jean W. Graber: Graber, Jean W. A Bioecological Study of the Black-Capped Vireo (Vireo Atricapillus), 1957.

P. E. H. Hair: Almada, Andre Alvares de. Brief Treatise on the Rivers of Guinea, 1984.

Mason Hale: Foster, A.S. Practical Plant Anatomy, 1942.

. ...

James T. Hancock: Hancock, Jane. Choestoe (where rabbits dance), 1894. Victor E. Hanzeli: American Indian manuscript materials.

David Jerry Hardy: Ralin, Dennis Barry. Genetic Compatibility and a Phylogeny of the Temperate North American Hylid Fauna, 1986. Gaudin, Anthony Joseph. A Comparative Study of the Osteology and Evolution of the Holarctic Tree Frogs, 1986.

Clark Harrison: Harrison, Clark. Long Way Home, 1985.

Mr. and Mrs. R. Hartle: Flint, Austin. A Textbook of Human Physiology, 1879.

Ray Hebert: Hellman, Manfred. Osteuropa in der historischen Forschung der DDR. Band 2: Bibliographie, 1972.

Kissinger, Henry. Years of Upheaval, 1982.

Ed Henderson: Annual Report of the Librarian of Congress 1960, 1961. Buchwald, V. F. Handbook of Iron Meteorites. Their History, Distribution, Composition and Structure, 1975.

Mrs. Samuel Herrick: Herrick, Samuel. Astrodynamics, 1971.

Jean Ross Howard: Powder Puff Derby: The Record 1947-1977, 1985.

Lona F. Huck: New York Lithographer, 1885.

The Lithographer and Printer, 1883.

American Lithographer and Printer, 1886-1889.

National Lithographer, 1895-1913.

The History of the Lithographer's Strike.

The Invention of Lithography.

Mekeel's Weekly Stamp News, 1895-1913.

Daily Stamp Item, 1896.

Edward F. Hufstedler: Sparon, Norman. The Poetry of Leaves, 1970. Ishimoto, Tatsuo. A Treasury of Japanese Flower Arrangements. Davidson, Georgie. Ikebana: The Art of Japanese Flower Arrangement, 1967.

Geoff Hurwitz: Hochheiser, Sheldon. Rohm and Haas. History of a Chemical Company, 1986.

James S. Hutchins: California Industrial Censuses [microfilm], 1850-80.

Maryhope C. Jacks: Twenty-six horticultural publications.

Fabian M. Jaksic: Articles by Hajek, Ernst. R. in Revista Chilena de Historia Natural, 1983-85.

Daisy Barnwell Jones: Jones, Daisy Barnwell. My First Eighty Years. Reiner Franz Klewen: Klewen, Reiner Franz. Untersuchungen zur

Verbreitung, Oko-Ethologie und innerartlicen Gliederung, 1986.

Karl V. Krombein: Bulletin de la Société Entomologique d'Egypte, 1980-81. Bulletin of the Entomological Society of Egypt, Economic Series, 1980-81.

G. Kundel: Kundel, G. Arboles Ornamentales en Jarolines Almerienses, 1986.

Kundel, G. Frutales Ornamentales, 1985.

Kundel, G. La Geografia en la Nomenclatura Botanica de Espana, 1985.

Marion S. Lamar: Bailey, Ralph. The Self-Pronouncing Dictionary of Plant Names, 1962.

Baylis, Maggie. House Plants for the Purple Thumb, 1973.

Plant Parenthood, 1975.

Consumer Guide Indoor Plant Buying Guide, 1977.

Everett, T. H. Flower and Garden Yearbook, 1960. Free, Montague. A Complete Guide to Gardening, 1954.

The Gardener's Catalogue: A Complete Compendium, 1974. The Gardener's Catalogue: Food Gardens, 1975. Gardening in Containers, 1967. Gardening with the Experts, 1941. Gottscho, Samuel. The Pocket Guide to Wildflowers, 1951. Hoare, H. Flowering Trees and Shrubs, 1905. Hottes, Alfred C. The Kev to a Beautiful Garden, 1937. How to Grow African Violets, 1962. How to Grow Camellias, 1957. How to Grow Roses, 1960. Jenkins, Dorothy H. The Complete Book of Roses, 1956. The Marshall Cavendish Encyclopedia of Gardening, 1968-70. New York Botanical Garden. House Plants, 1975. Park, Bertram. Roses: Hints on Planting and General Cultivation. Platt, Rutherford. A Pocket Guide to the Trees, 1953. Pratt, Richard. Gardens in Color, 1944. Putz, Alfred. The Garden Notebook, 1932. Steffek, Edwin F. Wildflowers and How to Grow Them, 1954. Taylor, Norman. A Guide to the Wildflowers, 1928. Murray Lawrie: St. George, Thomas R. Care of Postmaster, 1943. Baldwin, Thomas. Universal Provencing Gazetter, 1846. Dorothy Sarah Lee: American Folklife Center. The Federal Cylinder Project. A Guide to Field Cylinder Collections in Federal Agencies, 1984-85. Richard Leyes: Whittle, Frank and Ohain, Hans von. An Encounter between the Jet Engine Inventors, 1978. Steven Lubar: Weinberg, Meyer. America's Economic Heritage, From a Colonial to a Capitalistic Economy, 1634-1900, 1983. Charles D. Lungren: Thompson, Jonathan W. Italian Civil and Military Aircraft 1930-1945, 1963. Francillon, René J. Japanese Aircraft of the Pacific War, 1979. Gregory, Hollingsworth Franklin. The Helicopter, 1976. Loening, Grover. Amphibian. The Story of the Loening Biplane, 1973. Nadya Makovenyi: Lee, Seung-Ma. Butterflies of Korea, 1982. Robert Maloy: Leontief, Wassily. The Future Impact of Automation on Workers, 1986. Roszak, Theodore. The Cult of Information, 1986. Corti, Laura, ed. Census Computerization in the History of Art, 1984. Wolverton, Van. Running MS DOS, 1985. Rubin, Michael Rogers. Information Economics and Policy in the United States, 1983. Naisbitt, John. Megatrends. Ten New Directions Transforming Our Lives, 1982. Actes du Colloque sur les Inventaires des Biens Culturels en Europe, 1984. Brian Mason: Sinkankas, John. Mineralogy for Amateurs, 1964. Akademiia Nauk SSSR. Meteoritica, 1978. Robinson, Peter et al. Field Trip Guidebook: Regional Metamorphism and Metamorphic Phase Relations in Northwestern and

Rod Mast: Natural Resources and Environmental Management at North

Central New England, 1986.

American Universities.

Nancy Matthews: Twelve nineteenth-century agricultural almanac runs and a speech by Henry Clay (1838).

Amy Mazza: Technical and scientific equipment catalogs.

Margot Krause McCaffrey: Zur Tschuktschen-Halbinsel und zu den Tlinkit-Indianern, 1881/82.

Arnold Menke: Tsernyshev, V.B. Sutochnye ritmy aktivnosti nasekomykh, 1984.

Taksonomiia i Ikologiia Chlenistonogikh Dalnego Vostoka.

Sidney Michaelson: Tocher, K. D. Report on the Work of the Computor Group, 1952.

Michael Montgomery: 148 record catalogs.

Marla Moore: Radio documentation material.

Robert Multhauf: Fred L. Maytag: A Biography, 1936.

Donn B. Murphy: Lee, Douglas Bennett et al. Stage for a Nation.
The National Theatre. 150 years, 1985.

William L. Murphy: Trinidad Naturalist.

Anita Nettleton: Nettleton, Anita. Standard Bank Foundation Collection of African Art (1979-1986), 1986.

Dan Nicolson: A Catalogue of Type Specimens in the Harvard University
Herbaria (A/GH): Lamiaceae.
Index Florae Yunnanensis.

John Nicholson: The Greatest of Expositions.

Storrs L. Olson: Evolution and Morphogenesis: Proceedings of the International Symposium, Plzen, 24-29 August 1984, 1985.

Settlerwall, Carle G. A Study of the Syrinx in Polymyoda Passers.

Hugh Orr: Orr, Hugh. Illustrated History of Early Antique Spectacles,

1985.
Elinor M. Parker: 131 books on the history of textiles and embroidery.

Elinor M. Parker: 131 books on the history of textiles and embroidery. Jefferson Patterson: Air Commerce Regulations, 1927.

Talbot, Frederick. Aeroplanes and Dirigibles of War, 1915.

The First World Flight - As related by Lieutenants Smith, Nelson, Wade, Arnold, Harding, and Ogden to Lowell Thomas, 1925.

Flight: Fantasy, Faith, Fact. A Loan Exhibition Commemorating the 50th Anniversary of Powered Flight, 1953-54.

Wanda D. Peterson: The Complete Essays and Other Writings of Ralph Waldo Emerson, 1940.

Goulden, Joseph C. The Curtis Caper, 1965.

Woodward, C. Vann. Reunion and Reaction, 1951.

Fischer, Gert et al. Bierbrauen im Rheinland, 1985.

Giorgio Pilleri: Pilleri, Giorgio. The Miocene Cetacea of the Belluno Sandstones, 1985.

Pilleri, Giorgio. <u>University of Bern Anatomy Institute</u>. <u>List of Publications 1948-1984, 1984</u>.

Karen Preslock: Linsley, Ray K. et al. Hydrology for Engineers, 1975.

Labelle Prussin: Frescura, Franco. Major Developments in the Rural Indigenous Architecture of Southern Africa of the Post-Difagane Period, 1985.

Folco Quilici: Quilici, Folco. Italia dal cielo. Viaggio per immagini nella storia, 1981.

Quilici, Nello. Aviatoria, 1934.

Mildred D. Raitt: Armstrong, Nancy. Fans from the Fitzwilliam, 1985.
Orr E. Reynolds: Goodrich, Frank Bootn. The History of the Sea, 1880.

William A. Riley: Doll, Jackson and Riley, William A. Navy Air Colors.

United States Navy, Marine Corps and Coast Guard Aircraft Camouflage
and Markings, 1985.

Floyd A. Robinson: Who's Going to Pay For It?

Charles A. Roses: Brisbin, I. Lehr et al. A Bibliography of the American Alligator, 1986.

Henry A. Schutz: Teshigahara, Sofu. Ikebana Sogetsu, 1966.

Catherine Scott: Aeronautics and Space Flight Collections, 1985.

Henry Setzer: Dolgov, V. A. "Sorex" of the Old Light, 1985.

George Sharrar: Technology and Change.

David Shayt: Garvin, James L. et al. Instruments of Change. New Hampshire Hand Tools and their Makers 1800-1900, 1985.

Walter Shropshire: Bachrach, Uriel et al. Advances in Polyamine Research, 1983.

Tom Simkin: Biulleteny Bulkanologicheskikh Stantsii, 1976.

Tektonicheskie Obstanovki Geosinklinalnogo Vulkanizma, 1983.

Results of Researches on the International Geophysical Projects.

Correlation of the Mesozoic-Cenozoic Endogenous Processes of the Far East, 1983.

Dwight A. Smith: Smith, Dwight A. et al. <u>Historic Highway Bridges</u> of Oregon, 1985.

Bertha Sohn: World Seashells of Rarity and Beauty, 1983.

Israel Gregory Sohn: Sars, G. O. An Account of the Crustacea of Norway, 1922.

Nathaniel Spear, Jr.: Spear, Nathaniel, Jr. A Treasury of Archaeological Bells, 1978.

Ralf-Torsten Speler: Speler, Ralf-Torsten. Friedrich Wilhelm von Erdmannsdorff, 1981.

T. Spilman: Doane, Charles C. and McManus, Michael L., eds. <u>The Gypsy</u> Moth: Research Toward Integrated Pest Management, 1981.

Victor G. Springer: Fishes of the Okinawa Trough and the Adjacent Waters, 1984.

Allen, Gerald R. Fishes of Western Australia, 1985.

Axelrod, Herbert R. Atlas of Freshwater Aquarium Fishes, 1985.

John D. Stanitz: The Stanitz Collection of Science and Technology. Important Printed Books and Manuscripts, 1984.

Margaret Stanley: Lamson, Mary. Gardening with Shrubs and Small Flowering Trees, 1946.

Seymour, E. L. D. Home Gardens, 1917.

Simmons, James R. Historic Trees of Massachusetts, 1919.

Van Melle, P. J. Shrubs and Trees for the Small Place, 1943.

Wilds, Nancy. Church Grounds and Gardens, 1964.

Wright, Richardson. The Story of Gardening, 1938.

Hugh M. Sterling: Washington Field Museum. History of the Bug House Laboratory, 1985.

Jerome A. Stoll: Stoll, Jerome A. The American Indian Lance.

Jim Strawn: Airplane Power, 1943.

Garry K. Sturm: First National Competition and Exhibition for Violin and Bow Makers. 1 October 1984 to 5 January 1985, 1985.

Frances Mueller Swan: Swan, Frances Mueller. Once Upon a Rhyme, 1984. Swan, Frances Mueller. Through the Valley, 1978.

- John F. Szczepanski: Szczepanski, John F. Classification of Sub-Communities Found Within the Pitch Pine Lowland Community of the New Jersey Pine Barrens, 1985.
- F. Christian Thompson: Knoch, A. W. Neue Beytrage zur Insectenkunde, 1801.
 - Sahlberg, C. R. Periculi Entomolographici, Species Insectorum Mondum Descriptas Proposituri, 1823.
- Cecil H. Uyehara: Uyehara, Cecil H. Ten Keys to Modern Japanese Flower Arrangement, 1975.
- Nico J. Van Strien: Van Strien, Nico J. Abbreviated Checklist of the Mammals of the Australian Archipelago, 1986.
- Paulo E. Vanzolini: Vanzolin, Paulo E. et al. Repteis das Caatingas, 1980.
 - Vanzolin, Paulo E. An Annotated Bibliography of the Land and Fresh-Water Reptiles of South America (1758-1975). Vol. I (1758-1900), 1977.
- Thomas A. Varetoni: Leslie, Frank. <u>Historical Register of the United</u>
 States Centennial Exposition, 1876, 1877.
- Richard Vari: Shrestha, Jiwan. Fishes of Nepal, 1981.
 - Rajbanshi, K. G. A General Bibliography on Fish and Fisheries of Nepal, 1982.
 - Prosser, C. Lard. Comparative Animal Physiology, 1973.
 - The Marvels of Animal Behavior, 1972.
 - Elliott, H. Chadler. Textbook of Neutoanatomy, 1969.
 - Bridges, William. The New York Aquarium Book of the Water World, 1970.
 - Zeman, Wolfgang and Innes, James. <u>Craigie's Neuroanatomy of the Rat</u>, 1963.
 - Baklanoff, Eric N. The Shaping of Modern Brazil, 1969.
 - Burns, E. Bradford. Perspectives on Brazilian History, 1967.
 - Khanaichenko, N. K. The System of Equatorial Countercurrents in the Ocean, 1974.
 - Hunt, Cynthia A. and Garrels, Robert M. Water: The Web of Life, 1972.
 - Prichard, James Cowles. Researches into the Physical History of Man, 1973.
 - Buechner, Helmut K. and Buechner, Jimmie H. The Avifauna of Northern Latin America: A Symposium Held at the Smithsonian Institution 13-15 April 1966, 1970.
- Robert M. Vogel: Holbein's Dance of Death Exhibited in Elegant Engravings on Wood, 1858.
 - Smith, Matthew. Sunshine and Shadow in New York, 1869.
 - Freemont, Col. J. C. Oregon and California: The Exploring Expedition to the Rocky Mountains, Oregon and California, 1851.
 - Cassell's Book of Sports and Pastimes, 1880.
 - Williamson, Scott Graham. The American Craftsman, 1940.
 - Adams, James Truslow. Revolutionary New England, 1923.
 - Lester, Paul. The Great Galveston Disaster, 1900.
 - Sheahan, James W. and Upton, George P. The Great Conflagration: Chicago, its Past, Present and Future, 1872.
 - Morris, Charles. The San Francisco Calamity by Earthquake and Fire, 1906.
 - Duyckinck, Evert A. National Portrait Gallery of Eminent

Americans ... from Original Full Length Paintings by Alonzo Chappel, 1862.

Das Neue Buch der Erfindungen, Gewerbe und Industrien, 1875-79. Elliott, Ben G. and Consoliver, Earl L. The Gasoline Automobile, 1919.

Fraser, Edward S. and Jones, Ralph B. Motor Vehicles and Their Engines, 1922.

Reuleaux, F. von. Tratado General de Mecanica ... Cinematica y Constructor, 1878.

The Hill-Brunner Foundry Supply Company. General Catalog and Price List No. 10, 1916.

Baltimore Type and Composition Corp. A Catalog of Type, 1932. Gibson, Charles Dana. Everyday People, 1904.

Cassell's Book of Sports and Pastimes.

Douce, Francis. Holbein's Dance of Death and Holbein's Bible Cuts, 1858.

Alexander M. Voutsas: Voutsas, Alexander M. <u>Lunar Gravimeter</u>, 1986. Jozef Vozar: Das Goldene Bergbuch, 1983.

Tania Wahl: Fuji, Kasumi. The Art of Flower Arrangement by a Master of the Ikenobo School, 1935.

Shunko, Nakajima. Basic Instructions: How to Arrange Flowers by Yourself.

Japanese Flower Arrangement as Handed Down from Master to Master.

Gus W. Weiss: Gelb, Norman. Scramble. A Narrative History of the Battle of Britain, 1985.

Ellen Wells: Miller, Philip. <u>The Gardeners Kalendar</u> (1775), 1971. Books and Prints, Past and Future, 1984.

The Language of Flowers.

William West: West, William. Basic Oil Paintings, 1984.

Phyllis Steiss Wetherill: Wetherill, Phyllis S. Cookie Cutters and Cookie Molds: Art in the Kitchen, 1985.

John White: Sabatini, Richard. Kimberley Tramways, 1985.

Davis, Burke. The Southern Railway, 1985.

Pargas, Roger Aponte. Apuntes sobre el Ultimo Ferrocarrel de Puerto Rico. Ponce & Guyama Railroad.

Spoorwegen in Belgie. Chemins de Fer en Belgique. Railroads in Belgium, 1985.

Narrow Gauge Country.

Roger White: Bound for Glory.

Who Designs America?

310

Pontiac Motor Division Product Engineering. Oakland 75th Anniversary. Walt Disney World: The Official Guide.

United States Science Exhibit. World's Fair in Seattle 1962.

Buncher, Judith F. The School Busing Controversy 1970-1975, 1975.

Nicholson, Philip W. History of the Washington Fire Department, 1936.

.Automobile Club of Italy. World Cars 1978, 1978.

Automobile Club of Italy. World Cars 1979, 1979.

Heller, A. Motorwagon und Fahrzeugmaschinen für Flussigen Brennstoff, 1912.

Larry Wilson: Kaplan, Judith and Muniz, Robert. Space Patches from Mercury to the Space Shuttle, 1986.

Ludlum, David M. The American Weather Book, 1982.

Maloney, Edward T. Sever the Sky, 1979.

Frank H. Winter: The Missile A-4 Series B: Description of Missile as of January 2, 1945.

Mary Winters: Mawe, John. Treatise on Diamonds and Precious Stones, 1813.

Willis W. Wirth: Barber, T. Lynwood and Jochim, Michael M. <u>Bluetongue</u> and Related Orbiviruses, 1985.

Anne-Elizabeth Wolf: Wolf, A. E. Esquisse Phytocenotique de Larchant & Environs, 1983.

Thosaporn Wongratana: Phuket (Thailand) Marine Biological Center Research Bulletin, 1973.

Elizabeth Woodburn: Ilott, Charles. The Book of Asparagus, 1901.

Edmund T. Wooldridge: Bergsma, Herbert L. Chaplins with Marines in Vietnam 1962-1971, 1985.

Edmund Worthy: Doyle, Jack. Altered Harvest. Agriculture, Genetics, and the Fate of the World's Food Supply, 1985.

Ermi Zhoa: Proceedings of Sino-Japanese Herpetological Symposium, 1985. George Zug: National Seminar on Resources, Development and Environment of the Easter Ghats, 1982.

Dodd, C. Kenneth, Jr. et al. The Effects of Mining Siltation on the Distribution and Abundance of the Flattened Musk Turtle, Sternotherus depressus, in Northern Alabama, 1986.

Schieder, Peter. Wiens Tumpel, Teiche und Augewasser. Lebensraume Vieler Tiere und Pflanzen.

Reports of Ecological Researches to Diminish Bites of Habu Trimeresurus Flavoviridis in Okinawa Prefecture VIII, 1985. Birds of the Fiji Bush, 1984.

Tobey, Franklin J. Virginia's Amphibians and Reptiles. A Distributional Survey, 1985.

Institutional Donors

Academia Sinica, Institute of Vertebrate Paleontology and Paleoanthropology (China): Four books on early man in China.

Afrika Museum (The Netherlands): Haar in de Hoofdrol, 1986.

AT & T Bell Laboratories: O'Neill, E.F., ed. A History of Engineering and Science in the Bell System. Transmission Technology (1925-1975), 1985.

Banco Central de la Republica Dominicana: Arte Taino, 1985.

British Library: Baker, R. New and Improved. Inventors and Inventions that have Changed the Modern World, 1976.

Burndy Library: Grothe, Dr. Hermann. Leonardo da Vinci als Ingenieur und Philosoph, 1874.

Bensaude, Joaquim. Histoire de la Science Nautique Portugaise à l'epoque des grandes découvertes, 1914.

Ravetz, Jerome R. Astronomy and Cosmology in the Achievement of Nicolaus Copernicus, 1965.

Hackmann, W.D. John and Jonathan Cuthbertson. The Invention and

Development of the Eighteenth Century Plate Electrical Machine, 1973. Hartmann, Hans. Georg Agricola. 1494-1555. Begrunder Dreier Wissenschaften Mineralogie-Geologie-Bergbaukunde, 1953.

Kodo-Zuroku: Illustrierte Darstellung der Kupfergewinnung in Japan. Rey, Jean. The Essays of Jean Rey, 1951.

Nockher, Ludwig. Oskar von Miller, 1953.

Scheele, Carl Wilhelm. Chemische Abhandlung von der Luft und dem Feuer, 1970.

Mieli, Aldo. Volta y el Desarrollo de la Electricidad, 1948.

Dawson, Warren R.: The Huxley Papers. A Descriptive Catalogue of the Correspondence, Manuscripts and Miscellaneous Papers of the Rt. Hon. Thomas Henry Huxley, 1946.

Palacio, Diego Garcia de. <u>Instruccion Nautica Para Navegar. VIII</u>, 1944.

Farrington, Benjamin. <u>Francis Bacon</u>. <u>Philosopher of Industrial Science</u>, 1949.

Centre de Documentation et de Recherches sur l'Asie du Sud-Est et le Monde Insulindien: Bernot, Denise. <u>Bibliographie Birmane</u>. Années 1960-1970.

Drake Collection of the National Museum of Natural History: <u>Proceedings</u> of the Fourth International Locust Conference, 1937.

Florida State University: Essays on the Political Economy of Yugoslavia. Freshwater Fish Protection Association: Annual Bullentin of the

Freshwater Fish Protection Association, 1985.

Great Outdoors Publishing Company: Vankirk, Jacques et al. The World of Tikal, 1985.

His Majesty's Biological Laboratory (Tokyo): Nova Flora Nasuensis Supplementum.

Shigei, Michio. The Sea Urchains of Sagami Bay, 1986.

Indianopolis Museum of Art: Gilfoy, Peggy Stoltz. <u>Fabrics in</u> Celebration from the Collection, 1983.

The J. Paul Getty Museum: The J. Paul Getty Museum. Handbook of the Collections, 1986.

Jomar Enterprises: Martin, John G. Through Hell's Gate to Shanghai, 1983.

Lizzadro Museum of Lapidary Art: The Lizzadro Collection. Chinese Jades and Other Hard Stone Carvings, 1982.

Mercedes-Benz do Brazil, S.A.: Aromeri. Brazilian Indian Feather Art, 1986.

Musée des Arts Africains (Paris): Marchal, Henri. Musée National des Art Africains et Océaniens, 1986.

Yankel, Jacques and Lucette, Albert. Arts Africains Sculptures d'Hier-Peintures d'Aujour d'Hui, 1986.

National Building Museum: Lowry, Bates. <u>Building a National Image:</u> Architectural Drawings for the American Democracy 1789-1912, 1985.

Pitcairn Islands Study Group: Bloom, Wilfred. Pitcairn Postal History 1914 to 1927.

Qatar National Museum Library: Al-'Ush, Mohammad A. Arab Islamic Coins Preserved in the National Museum of Qatar, 1984.

Szatmari Museum (Hungary): Folkor es Etnografia, 1984.

United States Information Agency: Farkas, Jozsef. <u>Szatmari Ember</u> Szatmaritaj, 1983.

Farkas, Jozsef. Tanulmanyok Szatmar Neprajzahoz, 1984.

University of Aarhus (Denmark): Grignon, Isabelle and Johnsen, Palle.
Towards a Check-List of the Vascular Plants of Botswana, 1986.

University of Lagos (Nigeria): Offerings From the Gods.

University of Richmond: Gurung, K. K. Heart of the Jungle, 1983.

University of Utrecht (The Netherlands): Roosmalen, Marc G. M. van. Fruits of the Guianan Flora, 1985.

Washington and Lee University: The Washington and Lee Journal of Science, 1985-86.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Facilities Development

U.S. Army - Surfside Theater Building, Ft. Amador, Panama.

Tupper Foundation - Contribution to the Construction of the Earl S. Tupper

Research and Conference Center.

Educational Programs

Exxon Corporation - Fellowship and Assistantship Program

Jessie Smith Noyes Foundation - Latin American Predoctoral

and Postdoctoral Fellowships

Center for Environmental Education - Sea Turtle Coloring Books

Research

W. Alton Jones Foundation - Alternatives to Destruction

Center for Field Research/Earthwatch - Habitat Selection in

Tropical Forest Birds

Center for Field Research/Earthwatch - Tree Census on

Barro Colorado Island

Panama Canal Commission - 624 Books on Anthropology, Natural History,

Archaelogy and General Works

Tektronix Foundation - Computing and Advanced Graphics Equipment

Robert L. Silberglied Memorial Funds Mr. and Mrs. Harry Silberglied Mrs. Margaret Vandoren

Donors of Financial Support to the Freer

Anonymous
Clark Endowment Fund
Peter F. Drucker
Mitzi Jackson
Felix Juda
Robert P. Kahn
Thomas Lawton (John A. Pope Memorial
Fund)

Mary Livingston Griggs and Mary Griggs Burke Foundation John K. Havemeyer, Estate of Dr. and Mrs. Stanton Nolan Mrs. John A. Pope (John A. Pope Memorial Fund) The Smithsonian Associates, The Women's Committee John S. Thacher, Estate of

Donors to the Freer Collection

Robert H. Ellsworth
Roderick M. and Jane E. Engert
Robert Feinberg
Dean L. Frasche
Seiichi Honde

James G. and Ann S. Ling Elizabeth Gordon Norcross Michael M. Reynolds Mason M. Wang Donald J. Wineman

Donors to the Freer Study Collection

Louise A. Cort
Dean L. Frasche
Josephine H. Knapp
John Menke

National Palace Museum, Taipei Elizabeth Gordon Norcross Leila Philip

Donors to the Freer Library

Art Works Committee, Japan
Esin Atil
W. Thomas Chase
Louise A. Cort
Joseph G. Dietrich
George Jackson Eder
English-Speaking Union
John G. Ford
Shen C. Y. Fu
International Cultural Society of
Korea
Paul Jett
Kazuhiro Kokubo

Glenn D. Lowry
Mary C. Mackin
Helen McCauley
John Mosteller
Nagasaki Prefectural Art Museum
Ralph Rinzler
Fawaz al-Sabah
Frank Joseph Shulman
Dorothy F. Strong
Universitatsbibliothek der Freien
Universitat Berlin
Pam Vandiver
Ellen Bayard Weedon Foundation, The

Donors to the Arthur M. Sackler Collection

Robert McC. Adams
Mr. and Mrs. Fumio Kitaoka
Mr. and Mrs. Charles Page
Mr. and Mrs. S Dillon Ripley
Ms. Dorna Saunders

COOPER-HEWITT MUSEUM

Donors to the Collection

Mrs. Christian Aall Ahlstrom-Iittala, Inc. Barvoier & Toso Michele Beinv Ward Bennett Harry Bloomster Bloomingdale's Bob Mitchell Designs James Thomas Boyt Ruth Brown Bruno Danese Milano Carlo Moretti Casaform Champion International Corporation Garth Clark Quintina Colio Dr. David Cugell Daum Cristallerie de Nancy Mark Del Vecchio Robert and Frances Diebboll Elizabeth Draper, Inc. Lucy Fellowes Foscarini Muano Barry Friedman Elna Lindborg Friedman Gallery 91 Cora Ginsburg Henry Ginsburg Dorothy and Stephen Globus Marcia and William Goodman Rose Gottschalk Lillian C. Hart William B. Heller Herman Miller, Inc. Mrs. John Jay Ide Yoshiro Inazuka Martin Kamer Eleanor and Henry Kluck Jack Lenor Larsen Miles Lourie Paul Maurer Janet Mavec Penelope McCain David Revere McFadden Alice B. McReynolds Christopher Mendez Eleanor L. Metzenberg Florence Montgomery Carl Moos

Edward Munves, Jr.

Donors of Financial Support

\$50,000 OR MORE

Air India
Anonymous
Goethe House New York, The German Cultural Institute
Handicrafts and Handlooms Export Corporation of India
New York State Council on the Arts
Mr. and Mrs. Arthur Ross

\$20,000 OR MORE

The Barker Welfare Foundation Consumers Union Mrs. John A. Corroon The James Smithson Society Honorable and Mrs. Thomas J. Watson, Jr. Mrs. Peter G. Wray

\$10,000 OR MORE

Mrs. Christian H. Aall Barneys New York Lufthansa German Airlines Helena Rubinstein Foundation The Tulane Educational Fund

\$5,000 OR MORE

Artemide, Inc.
Bayerische Vereinsbank
Bristol-Myers Co.
Debevoise & Plimpton
Finnair
Finnish Ministry of Education
The First Boston Corporation
E.F. Hutton & Company Inc.
Iitala Glass Works
Kansallis-Osake-Pankki
Mrs. John Kieckhefer
Merrill Lynch & Co., Inc.
Nuutajarvi Glass
Pan American World Airways, Inc.

\$1,000 OR MORE

Anonymous

Avon Products, Inc.

Bessemer Securities Corporation

Bloomingdale's

Mrs. William B. Boyd

Mr. Edward Lee Cave

Carter Hawley Hale Stores, Inc.

The Coach Farms

The Conde Nast Publications, Inc.

Consolidated Edison Company of New York, Inc.

Mr. and Mrs. C. Douglas Dillon

Mr. Mark Hampton

Mr. Gordon Hanes

The Irwin Family

Johnson & Higgins

Klebanow Family Philanthropic Fund/Jewish Communal Fund of NY

Lee/Jofa

Mrs. John L. Loeb

Mr. and Mrs. Russell Lynes

Mrs. Louise L. Melhado

Mr. and Mrs. Paul Mellon

Metropolitan Life Foundation

Mr. Kenneth Miller

Napier Foundation

Neuberger & Berman

The Ohrstrom Foundation, Inc.

Mr. William S. Paley

Mrs. Lillian Nassau Palitz

Mr. and Mrs. Samuel P. Reed

Saloman, Inc.

Joseph E. Seagram & Sons, Inc.

Mrs. Ben J. Slutsky

Ruth and Frank Stanton Fund/New York Community Trust

Stavropoulos Corporation

Mrs. Iphigene O. Sulzberger

Mrs. Marietta Tree

John E. Wiley & Sons, Inc.

Mr. R. Thornton Wilson

\$500 OR MORE

Mr. and Mrs. Giovanni Agnelli

Anonymous

Mrs. Vincent Astor

Mrs. Douglas Auchincloss

Mrs. Lily Auchincloss

Mr. Bill Blass

Mr. Mario Buatta

Mr. Carter Burden

Mrs. Mary Sykes Cahan

Count and Countess Frederic Chandon de Briailles

Miss Quintina Colio

Mrs. Joan K. Davidson

Mr. A. Theodore Dell

Mrs. Charles W. Englehard

Mr. Malcom Forbes

Mr. Harmon Goldstone

Mr. John H. Gutfreund

Mr. Albert Hadley

Mrs. Alfred Harrison

Mrs. Enid Haupt

Mr. and Mrs. August Heckscher

Mr. William Hodgins

Nancy, Lady Keith

The Helen R. and Harold C. Mayer Foundation

Monsieur Henri Wines

Mr. and Mrs. Lester S. Morse, Jr.

Mrs. Nelson A. Rockefeller

Mr. and Mrs. Felix Rohatyn

Mr. Matthew Schutz

Mr. John A. Scrymgeour

Mr. Henry Slack

Mr. Garrick Stephenson

Mr. Gene Tyson

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Donors to the Collection

Robert Brown
Mr. and Mrs. John Moors Cabot
Federal Bureau of Investigation
Philippe Lamotte
Sydney and Frances Lewis
Sydney and Frances Lewis Foundation
Dr. Penn Lupovich
Louise R. Noun
John and Mary Pappajohn
Betty Parsons Foundation
Robert D. Rogers

Donors of Financial Support

Art Lovers League, Baltimore, Maryland
William and Virginia Brody Foundation
Ethel Rosenfeld (in memory of Nathaly C. Baum, a former docent
of the Hirshhorn Museum and Sculpture Garden)
Women's Committee of the Smithsonian Associates

Donors to the Library

Olga Hirshhorn

NATIONAL AIR AND SPACE MUSEUM

Donors of Financial Support

Aerojet General Air Traffic Control Association Safety Foundation, Inc. Mr. John S. Alcorn Mr. John L. Allen Alliance Capital Management Corporation Ms. Lynn J. Alton Mr. John F. Amendola American Stock Exchange Mr. Barry G. Ams Mr. Karl M. Anderson Mr. John J. Apalatequi Ball Aerospace Systems Captain Wallace J. Balla Mr. George C. Barber Mr. Jack B. Baumann Mr. Frank W. Beatty Ms. Barbara Becker Mr. Harold R. Beemer Mr. L. E. Beidleman Arthur, Yvette, and Melissa Benjamin Mr. William R. Benton Mr. Robert Berreyesa Bethesda Travel Center Mr. Clyde G. Bourgeois Mr. John C. Brandt Mr. Jack L. Bromberg Mr. David W. Brown Mr. Russell W. Brown Mr. Melville L. Bruml Mr. and Mrs. F. W. Bunker Mr. and Mrs. George V. Butler Ms. Mary L. Butler Mr. Jack L. Campbell Mr. A. J. Carah Mr. Charles Winslow Clements Ms. Ella Cleveland Mr. Firley Cleveland Mr. Walter C. Cleveland

Mr. John R. Cogswell

Mr. Neldon D. Colton Mr. Daniel M. Conner

Mr. M. B. Coyner

Mr. Darrell Crosby Glenn H. Curtiss Museum Mr. William E. Daniel Mr. Owen A. Darcey Mr. Ralph P. Davey Captain George W. Davis, USN (Ret) Dr. Jane E. Di Giovanni, Ltd Mr. Archie C. Dial Mr. Frank L. Dickey Mr. George W. Diemer Digital Equipment Corporation The Disney Channel Mr. William R. Downs Drexel Burnham Lambert Mr. Peter Drummond Eastman Kodak Company Mr. James B. Edwards Mr. Howard W. Ehinger Mr. Louis R. Eltscher Ms. Louise C. Farquhar Federal Express Corporation Mr. and Mrs. Harold E. Felix Figgie International Mr. Charles M. Flint Mr. and Mrs. David M. Forbes Dr. and Mrs. Harold W. Ford Mr. Claude H. Fowell Mr. Cedric E. Galloway Mr. and Mrs. Raymond Geckle General Electric Corporation W. L. Gore and Associates, Corporation Mr. and Mrs. R.L. Graser Mr. Donald V. Hagill Mr. and Mrs. Bert M. Hall Mr. and Mrs. John L. Hardman Mr. Edward Harpoothian Mr. Frank P. Heck Mr. Victor F. Hedemark Mr. Charles A. Hedges Ms. Kay Hile The Hollinger Corporation Mr. Richard H. Howe Mr. Robert E. Ivey

Mr. Laird G. Jackson Mr. Gregory P. Jakus Miss. Shelia M. Jones Mr. Edward S. Johnson Mr. Eugene C. Kaliher Mr. Nicholas V. Karstens Mr. Ernest W. Kazmar The Kirkpatrick Foundation, Inc. Mr. Robert M. Kiser, Jr. Mr. W.N. Kee Mr. and Mrs. Donald L. Keeton Ms. Clara J. Kesler Mrs. Donna Klarquist Mr. Cornelis Kraakman Dr. James Kramer KTVI Times Mirror Broadcasting Mr. Adolph E. Kumbula Mr. and Mrs. Emerson H. LaBombard Mr. Larry S. Ladd Mr. Richard D. Larsen Ms. Anna V. Larson Mr. Saul Liskin Mr. Kenneth L. Love Mr. and Mrs. Reino E. Luoto Mr. Gary Mainhart Mr. Joseph F. Manuel Mr. and Mrs. William B. Manning Marine Corps AVIA, Associate Mars, Incorporated
Martin Marietta Corporation Mr. Fred R. Martin Mr. Robert N. Martin Mr. Robert P. Martin Jr. Tadamichi Masujima Mr. and Mrs. Clyde G. McCall Mr. John E. McCarthy Mrs. Helen J. McCray Mr. Brian McDonnell Mr. and Mrs. Harry L. McGugin Ms. Helen Claire McMahon Mr. and Mrs. Donald L. Meehan Mr. Richard D. Meixell Mr. Claude D. Meyers, Jr. Ms. Anna Marie Milton National Aviation Club National Geographic Society National Space Club Mr. R.W. Nelitz Mr. Donald E. Niles Mr. Alvin A. Ozminski Mr. Cyrille M. Peabody

Mr. and Mrs. John S. Perrotti Mr. and Mrs. Thorvald K. Petersen Mr. Arnold E. Peterson Mr. Byron C. Peterson Mr. Ed Phillips Piasecki Aircraft Corporation Mr. Robert J. Pickett Dr. Phillip L. Poffenbarger Mr. Frank T. Pugliese Mr. Anthony G. Puglisi Mr. Louis C. Raburn M. B. Renner Mr. Samuel C. Resnick Rockwell International Corporation Mr. and Mrs. H. S. Rodgers Mr. Norman Rosenstock Mr. Eric S. Ruark Mr. Arthur E. Scholl Mr. James E. Scoggins Mr. Edward C. Sheldon Mr. Warren D. Shipp Dr. Richard W. Sloan Ms. Frances A. Smith Mr. Paul L. Smith Mr. Theodore D. Smith Thomas L. and Lucy Smith Mr. Jay P. Spenser Mr. William T. Stanger Mr. Doss B. Steed, Jr. Mr. Thurman W. Stephens Mr. Authur and Sharon Sugerman Mr. Joseph Teicheira Mr. William W. Thayer Mr. John W. Thomas Mr. Robert S. Thorne Toucan Corporation Mr. J. D. Turner U. S. Naval Institute Mr. and Mrs. J. D. Van Dyke Jr. Mr. Steven J. Viscovich Mr. Eugene W. Waterbury Mr. and Mrs. Joseph L. Waisman Mr. Ralston L. Weaver Mr. James E. Webb Mr. Lawrence M. Weeks WEI T'O Associates, INC. Ms. Karin Westberg Mr. and Mrs. Leroy C. Willmann Mr. Robert E. Winchell Mr. Walter Wyckoff, II Mr. Robert Wynne Mr. Ronald A. Yaros Mr. William B. Yates

Mr. David Peck

Dr. Lyle F. Pepino

The Perkin-Elmer Corporation

Donors to the Collection

Acorn Products Company Inc .: shuttle slipper socks.

Mr. Danay Adams: radial Whirlwind J-5 aircraft engine.

Mr. Jacques Beaudet: aircraft engine model.

Mr. James H. Brodie: Brodie aircraft landing system.

Mr. George J. Capestany, Jr.: leather briefcase used by U.S. Civil Aeronautics Authority with USCAA insignia.

Mr. Norman F. Carden III: Erco model I-L 116 aircraft engine and Sensenich propeller.

Hern Peter W. Cohausz: German World War II ammunition counter.

Coca Cola Company: 2 Coca Cola cans, one flown on Challenger, STS-51-F.

Mr. Mery Corning: 4 prints, The Arizona Balloon Buster, The Boy Legend, The Red Knight of Germany, King of the Air Fighters by Merv Corning and painting, Rickenbacker: American Ace of Aces by Merv Corning.

Mrs. Carol Cruise: uniform and memorabilia belonging to Captain Carl Cruise, USN.

Dr. E.J. Cunningham: sculpture, Charles Lindbergh by Don F. Wiegard.

Ms. Fiorenza de Bernardi: first officer uniform of Aeralpi (Italy).

Mr. Howard DeVorkin: Gemini B model manned orbiting laboratory.

Mr. Ralph B. Diller: signal lamp, "Flash-A-Beam".

Dr. Robert L. Drapkin: ambrotype of John Steiner.

Mr. John Owens Duffy: recognition training poster. General and Mrs. Ira C. Eaker: General Eaker's uniforms.

Mr. Robert Edwards: Edison-Phonograph aircraft bombsight

Embassy of Columbia: Columbian Air Force ceremonial dagger.

Environmental Photographic Interpretation Center (Environmental Protection Agency): enviro-pad aerial camera system.

Mr. Phillip C. Farmam: Kasperwing (180B) aircraft.

Mr. Roland D. Foley: 2 flying coveralls and one pair spike protective jungle boots.

Fort Huachuca Museum: World War II Japanese Samurai sword.

Fort Sheridan Museum: fixed machine qun (from Vickers model 1918).

Mrs. Betty Skelton Frankman: Pitts Special aircraft, "Little Stinker".

Ms. Mary Edna Fraser: silk batik, Kaiwah Island, S.C. by Mary Edna Fraser.

Mr. Dennis Gilliam: pair Mark IV gloves.

Mr. Larry Graham: anthropomorphic mechanical android used in support of manned space flight programs and to test space suits.

Mr. Roland M. Grand: World War II Free French Air Force service uniforms.

Mr. H.J. Gross: P-3A instrument flight trainer.

Mr. Robert W. Hayes: 25 paintings, Pfalz DXII With Sopwith Camel, 1918, Von Richthofen's Last Flight, Von Richthofen's 80th Victory, Von Richthofen's "Blue Max" Victory, Von Richthofen's First Victory, Sopwith Triplanes on the Attack, SBD Dauntless Attacks a Japanese Carrier, F4F Wildcats on the Attack, TBF Avenger Torpedo Bomber, F6F Hellcat and Zero, Spitfire Downsa Stuka, Mel09, P-40 Flying Tiger Over Burma, Albatros DV and S.E.5, Nieuport 27 Versus Rumpler, Sopwith Camel and Fokker Triplanes, Fokker DVII and S.E.5, B-25 Mitchell Bombers Attack Rabaul, Morane-Saulnier-Downs Aviatik, F4U Corsair, P-47 Thunderbolt and FW190, B-26 Marauders Over Rhine, F4E Phantom Jet, P-51 Mustang and Mel09 and Balloon-Busting Spad XIII by J.B. Deneen.

Mr. Thadd Howell: German flight computer.

Hughes Aircraft Company: Geostationary Operational Environment Satellite (GOES) full scale model.

Itek Corporation: full scale cutaway model of large format camera.

Mr. Glenn E. Jennings: flight jacket and 2 "blood chits".

Mr. E.A. Jurist: Vietnamese cyclo.

Mr. George T. Kidd: Lockheed S-3B Viking model aircraft.

Mr. H. Douglas Kline: 45 airframe and engine tools.

Ms. Ana Kozel: 2 paintings, <u>Breakage of Light Waves</u> and <u>Light Series IV</u> by Ana Kozel.

The Marquardt Company (through F.K. Lampoon): Marquardt rocket engine model R-41.

Mr. Robert G. Leclerc: Hartzell propeller.

Mr. Vincent Loiacono: 2 flying model aircraft kits, ca. 1930.

Mr. Barry Mahon: painting, Portrait of Flight Lieutenant J.B. Mahon by Don Stein.

Dr. John Marshall: North American B-25J (TB-257) aircraft and wing covers.

Mr. Doug Martin: World War II kite target kit and spares.

Mr. Charles S. Marston: 2 Edo floats with hardware.

Mr. and Mrs. John T. McCutcheon: Lindbergh commemorative map.

Ms. Eleanor M. McNinch: Early Bird pin owned by Frank Coffin.

Mr. Robert Mills: 1 pair World War I leather fur-lined flying boots, gloves, goggles, and 2 flying suits.

Rear Admiral William A. Moffett, Jr.: 1 painting, <u>Admiral Moffett, Sr.</u> by H. Stanley Todd.

Mr. Greg Mort: painting, Third From the Sun by Greg Mort.

Mr. Peter Moseley: 10 Sperry Flightray instruments and equipment.

Mr. William W. Mowers: 1 propeller blade tip (believed to be from the Hindenburg).

National Aeronautics and Space Administration, Goddard Space Flight Center: Apollo spacesuit.

National Aeronautics and Space Administration, Headquarters: space shuttle "Enterprise" (OV-101).

National Aeronautics and Space Administration, Johnson Space Center: space food, training capture device, space shuttle cockpit simulator, space shuttle tiles from "Columbia", crew patch plaque, REG fuel cask and 7 communications carriers.

National Aeronautics and Space Administration, Langley Research Center: wind tunnel model, 2 ablation sensor displays, Trailblazer II radiation telescope display, event recorder display, flow direction-velocity sensor display, control position transducer display and Gemini skidwell door on stand.

National Aeronautics and Space Administration, Marshall Space Flight Center: Apollo telescope mount (Skylab) and scientific instruments.

Mr. James L. Nelson: World War II observer's badge, identification tag and naval aerial photographers coat.

Mrs. Viola M. Newton (through Mr. Kenneth W. Cooper): Norden bombsight.
Mr. Paul D. Ortlip: 15 drawings, Visit with Randy Stone, Helicopter 66
Lifts-off, Lt. j.g. Witten and Lt. Comdr. Sam Walling, Crash and
Salvage on Flight Deck, Capt. Carl Seiberlich USN, Lt. Comdr. Sam
Walling, Pilot, Don Karasik, Bob Stankus, Dallas Townsend, Bernie
Eismann, Work Crew in Hangar Bay, General Electric Transmitter
Bubble, FOD Plane on Flight Deck, PHC James Hudak with Movie Camera,
Change of Engines onell in Hangar Bay, Spacecraft on Rear Elevator,
Forward Deck Scene and Afternoon Activity Near Transmitter Bubble by
Paul D. Ortlip.

Mr. Stacy Pass: radioplane aircraft drone.

Mr. Woodward Payne: painting, Morning Mist by Woodward Payne.

Pepsi Cola, USA: Pepsi Cola can flown on Challenger, STS 51-F.

Petrus Operating Company: U.S. flag carried on "Spirit of Texas" helicopter.

Prime Computer Corporation: Prime 550 computer and associated hardware. Dr. Erna Roth-Oberth: model of Herman Oberth's Kegelduse rocket engine.

Mr. Burt Rutan: VariEze aircraft.

Mr. Paul Ryan: Ryan stormscope weather mapping system.

Saint Mary's Hospital: JULIE getaway special, flown on shuttle.

San Jose State University: Pratt and Whitney R-1340-An-50 engine, Lycoming R-680-9 engine, NAF R-975-30 engine, Jacobs R-755 engine, Jacobs engine mount, Titeflex Metal Hose Co. ignition harness and Jacobs airfilter scoop.

Santa Barbara Research Center (Hughes Aircraft Company): thematic mapper full scale model.

Mr. Patrick Scarano: Eastern airlines uniform, 1940.

Mr. R.H. Scheppler: 16 World War II aircraft instruments.

Mr. John Clark Sellers: control unit from Matthew Sellers 1909 airplane.

Sikorsky Aircraft (through Mr. Gerald B. Stofer): Sikorsky S-72 model aircraft.

Singer Company, Link Flight Simulation Division: Link trainer prototype and terrain board.

Mr. James R. Slay: World War I U.S. Army shaving kit.

Society of Women Geographers: flag of the Society of Women Geographers flown on shuttle.

- Ms. Virginia Stainton: painting, <u>Thunder in the Canyon</u> by William Phillips.
- Ms. Elizabeth Tate: gas stove burners used by Wright brothers at Kitty Hawk.
- Mr. Victor W. Tatelman: U.S. Navy aircraft torpedo camera.
- Mr. Harry C. Theurer: Rotorway Scorpion Too helicopter.
- Mr. W. Donald Thomas: 36 commercial aviation and travel posters.
- Mr. T.W. "Bill" Tinkler: United airlines pilot uniform.
- TRW Inc. Electronic and Defense Sector: tracking and data relay satellite (TDRS).
- Mrs. Jean Bowie Thorpe: KIM napkin, 1933 commemorating KIM service from Amsterdam to Batavia.
- Ms. Diana Tuby: Wein Air Alaska uniforms.
- Turkish Air Force Museum (through Isik Duven and the Turkish Embassy): 1 painting, Captain Fazil Bey's Dogfight Against a British Fleet Over Istanbul by Sukru Caglayan.
- U.S. Air Force, Indian Head Naval Ordnance (through Captain Carmon L. Woodley): various World War I bombs, armament and aircraft ejection seat.
- U.S. Air Force Museum, Wright-Patterson AFB: World War II German memorabilia, German air force incendiary bomb and Luftwaffe flying boots.
- U.S. Army, Center for Military History: "Little John" missile with launcher
 - and trailer.
- U.S. Army, NAVPRO (through General Electric Company): General Electric XT 700 engine and tool kit.
- U.S. Army Strategic Defense Command: Homing Overlay Experimental (HOE) vehicle.
- U.S. Space Command: U.S. Space Command flag.
- University of California: 2 aircraft engines, Junkers Jumo 004 turbojet and
 - Lawrence J-1.
- Honorable Guy W. Weiss: 5 aircraft models, Boeing 737, Boeing E-6, Boeing
 - KC-135R, Lockheed TR-7 and McDonnell Douglas.
- Mr. Kenneth D. Williams: World War II U.S. Army Air Force flying jacket ("Murder, Inc.") and personal memorabilia.
- Mr. Gus Wolf: sign from Hadley Airfield.

Donors to the National Air and Space Archives

- Mr. Rex T. Barber: photographs and biographical material on Rex T. Barber.
- Mr. Samuel L. Batchelder: World War II aerial photographs, field manuals, photograph albums, and magazines.
- Mr. Leroy Blum: 9 photographs of a Porterfield LP-65, circa 1979-1984.
- Mr. Warren M. & Catherine C. Bodie: 95 photographs of military, commercial, and private aircraft.
- The Boeing Company: marketing brochures, booklets, and pamphlets of Boeing aircraft, from the B-707 to the B-767, 1970-1985.
- Mr. Walter J. Boyne: 773 photographs of various U.S. and foreign aircraft.
- Mr. W. J. Brockett: aviation logbooks, certificates, and licenses of Samuel Russell Halley, 1917-1946.
- Mr. Gary Brounstein: photographs of aircraft from the 1986 Abbotsford International Airshow, and 21 photographs of a Russian-built MIG-15.
- The Center for Earth & Planetary Studies, NASM: Voyager 2 photographs of Uranus.
- Mr. John W. Charlton: the Gladys Maud Cockburn-Lange Collection, 1916-1960.
- Mr. William L. Dean: photograhs and memorabilia of Ira C. Eaker.
- Mrs. Dorothy Risley DeCamp: photographs of Lowell R. Bayles and the 1931 NAA convention.
- Department of Aeronautics, NASM: flight test reports of Platt-LePage XR-1 helicopter, 1941-1946.
- Department of Aeronautics, NASM: annual reports of commercial air carriers.

 Department of Aeronautics, NASM: Aircraft of the National Air and Space

 Museum, 1981, photographs and original text.
- Department of Aeronautics, NASM: photograph of Charles A. Lindbergh and certificates of award to Lester Gardner and Edmund Turney Allen.
- Department of Aeronautics, NASM: file on helicopter designed and built by Dr. Harold C. Theurer, circa 1973.
- Mr. Edmund J. Dickinson: 6 photographs of Amelia Earhart taken on June 2, 1937, at Caripito, Venezuela.
- The Edison Institute: 14 aperture cards of blueprints of the original engine used in the 1903 Wright Flyer.
- Mrs. Daryl Ferguson: photograph of Fokker T-2 flown coast-to-coast in 1923.
- Mr. Horace B. Forman III: "From Earth to Sky," unpublished manuscript edited by Elizabeth Chandlee Forman, undated.
- Mr. Peter Gadd: photograph of North American X-15 autographed by Robert White, Scott Crossfield, and Joe Walker.
- Mr. Karl A. Gaertner: photograph of Selfridge Field, Michigan, circa 1917-1918.

- Mr. Calvin N. Hall: photographs of airmen in Yugoslavia during World War II.
- The Estate of Nancy Hamilton: extensive biographical materials on Arthur Whitten Brown, primarily documenting the Alcock-Brown flight across the Atlantic in 1919.
- Ms. Betty Hayes: two 1927 newspapers headlining the arrival in Washington, DC, of Charles A. Lindbergh.
- Mr. F. E. Hollar: photograph of the 40th Aero Squadron, 1918.
- Ms. Evelyn L. Irons: photograph album of Roy N. Francis.
- Ms. Shelia F. James: audio tape interview of John P. Feagley.
- Mr. Kenneth A. & Amy G. Job: audio taped interview of Carl Thompson.
- Mr. H. Douglas Kline: aircraft technical manuals.
- Ms. Mieczysława Wanda Kozak: 19 photographs of artwork by Sgt. Norman R. Garbov at Mitchel Field, New York, in 1946.
- Colonel Lawrence Lahm, USA: memorabilia of Major General Frank Purdy Lahm, circa 1899-1974.
- Mr. Lee A. Lendt: aircraft technical manuals.
- Mrs. Marie Long: biographical materials of Captain Elgen M. Long.
- Mr. Jackson Barry Mahon: RAF pilot log book of Jackson Barry Mahon, 1941-1942.
- Mr. Robert Paul Mann: material from the photographic section of the U.S. Air Service of the AEF in World War I.
- Mr. & Mrs. Vic Masdeo: 32 photographs and a unit history of the U.S. Navy's Squadron Two, 1943-1945.
- Mr. Robert B. Mawhiney: photographs of the first air mail flight, 1918.
- Mr. Robert B. Mills: photographs of aviators and aircraft in Nevada in the mid-1920s.
- The Minnesota Historical Society: scrapbook of aviation scenes in Memphis, Tennessee, circa 1830.
- Mr. Walter Moucha Sr.: photographs and 3-view drawings of Piper PA-8 Skycycle.
- National Archives and Records Administration: Internal Bureau Change Committee records, 1951-1960.
- National Archives and Records Service: U.S. Navy Aeronautical Plans Files
- Mr. James L. Nelson: biographical material on Nels Edward Nelson.
- Ms. Karen A. Nelson: photographs, newsclippings, instructional materials, and memorabilia of Carl Norman Nelson, circa 1937-1950.
- Mr. Vincent O'Loughlin: aircraft manufacturers' sales brochures, circa 1938-1939.
- Mr. Ameglio J. Paglino: <u>L'Historie des "Dirigeables"</u>
 <u>Santos-Dumont</u>, circa 1902."
- Mr. James Parton: 3 transparancies of Major Parton taken in 1943 as aide to General Ira C. Eaker, and photographs of Parton, 1936-1986.

- Mr. Francis C. Pogue: 182 aircraft recognition slides, circa 1947.
- Honorable Senator Jennings Randolph: copy of an undated letter from Thomas Jefferson concerning aeronautics, and copy of the first bill introduced in Congress for an appropriation for aeronautics, 1893.
- Ms. F. G. (Shutsy) Reynolds: publication on use of guidons at Avenger Field, Texas.
- Mr. Robert & Jenny Roman: postcard carried on the Martin MB-1 "Around the Rim Bomber" in 1919.
- Mr. Joseph L. Sacchini: biographical material on Mary Ann Campana, circa 1933-1986.
- Dr. Margaret M. Scheffelin: files documenting Dr. Scheffelin's membership on the Defense Advisory Committee on Women in the Services (DACCWITS), 1981-1984.
- Mr. Ted Seaman: "A Photographic Record," an unpublished account of the Second Aviation Instruction Center of the AEF, 1918.
- Mr. C. H. Seaton: reports on MX-774 missile.
- Mr. Matthew Bacon Jr. & John Clark Sellers: biographical materials of Matthew Bacon Sellers Sr., circa 1899-1914.
- Space Science & Exploration Department, NASM: NASM's 10th anniversary "birthday card."
- Space Science & Exploration Department, NASM: 52 audio tape interview transcripts.
- Mr. Jay P. Spenser: 117 photographs of Boeing B-17 Flying Fortresses, circa 1940-1985, and biographical materials on various aviation personalities.
- Mr. Zdzislaw I. Szewczyk: Airborne Radar Technical Archive.
- U.S. Department of Transportation: technical manuals on various aircraft.
- United Technologies Corporation: United Technologies Corporation publications, 1928-1985.
- Mr. Albert Vollmecke: corporate files of Command-Aire Company, circa, 1928-1930.
- Mr. Dwane L. Wallace: biographical materials on Dwane L. Wallace, 1971-1982.
- Mr. Richard Webb: publicity materials on the "Captain Midnight" television program.
- Mrs. Pat Thaden Webb & Bill Thaden: personal papers and memorabilia of Louise McPhetridge Thaden, circa 1928-1984.
- Mr. Don Welzenbach: records documenting the development and testing of lens and optics used in the Fairchild KS-25 High Acuity Camera System, 1956-1967.
- Mr. Roger B. White: brochures and photographs of various aircraft, air carriers, airports, and space projects.
- Mr. Howard Wolco: aircraft technical manuals.
- Mr. C. Albert Wolff: articles on various aircraft and aviation personalities.

NATIONAL MUSEUM OF AFRICAN ART

Donors of Financial Support

Center for Cross Cultural Communication
Prof. David C. Driskell
Mr. Stanley H. Feldberg
Friends of the National Museum of African Art
Philip Morris, Inc.
Mr. Robert H. Nooter
Milton F. and Frieda Rosenthal
Mr. and Mrs. M. A. Samuels
Shell Companies Foundation, Inc.
Mr. Michael R. Sonnenreich
Mr. Paul Tishman

Donors to the Collection

Mrs. William Bascom
Smithsonian Institution, Hirshhorn Museum and Sculpture Garden (Transfer)
Mrs. Ida C. Merriam
National Museum of Togo
Robert and Nancy Nooter
Milton F. and Frieda Rosenthal

NATIONAL MUSEUM OF AMERICAN ART

Donors to the Collection

Anonymous private donor Josef and Ewa Blass Barbara Latham Cook Joseph and Robert Cornell Memorial Foundation Dr. David W. Cugell Joseph Dankowski Joseph Davenport, Jr. Robert R. Ecker Boyce George Eidson Edward Elson Victor Gross Mr. and Mrs. R. Philip Hanes, Jr. John Hauberg Frank Herrera Charles Lamson Hoffman family Patrick Ireland Samuel Johnson Mr. and Mrs. Robert Judelson Edward Den Lau Nan Tucker McEvoy Frank J. McKeown

Lefferts J. Mabie Jerome B. Monfred Enid H. Munroe National Museum of Natural History Mr. and Mrs. J. O'Connor Dr. Lewis Obi Mrs. Hellen Miller Obstler Mr. and Mrs. Kurt Olden Mrs. Charles Prendergast Fred Quinn Henry Ward Ranger Bequest, through the National Academy of Design Sara Roby Foundation Henry D. Ross Herbert J. Sanborn Joshua P. Smith U. S. General Services Administration Mr. and Mrs. William W. Waterman Virginia Zabriskie Tessim Zorach

NATIONAL MUSEUM OF AMERICAN ART

Donors of Financial Support

Ronald Abramson Anne Akman Anonymous Rachel M. Allen Donald B. Anderson Oliver Anderson Thomas N. Armstrong III Margaret L. Ausfeld Ralph T. Backlund Franz Bader Ellsen S. Barry Wilson T. M. Beale Louise and Stephen P. Belcher, Jr. Avis Berman Elizabeth B. Blake Ruth and Daniel Boorstin Mrs. Barbara W. Booth Thomas W. Bower Barbara and Philip Bowie Ann Allston Boyce Jean Campbell Brackett Robert G. Braden Carole A. Broadus Jane K. Brooks Dorothy B. Brown Lorraine Broyard Valerie K. Burden Margery Byers Carolyn K. Carr Florine and Thomas Carter Leslie Cheek, Jr. Cecilia H. Chin Patricia and James J. Chmelik Carroll S. Clark Jeannine S. Clark Coe Kerr Gallery, Inc. Margaret Cogswell Harryette and Marcus Cohn Kitty Coiner Margaret and Roger Cole, M.D. Dorothy Dann Collins Andrew L. Connors Alice P. Coyle Ann M. Creager Bartlett Hayes, Jr. Mildred Heller

Christine Hennessey

Irene Heppner

Miriam Crocker Priscilla Cunningham Dr. and Mrs. Abraham W. Danish Mary Louise B. Day Lorrie DeCreeft James T. Demetrion Lamar Dodd Mrs. Elizabeth P. Dominick Mary and Werner Drewes Pauline M. Edwards Jane and Charles Eldredge Edward E. Elson Exxon Corporation Jane and Donald Farmer, Jr. Fendrick Gallery, Inc. Lois and Alan M. Fern Lois M. Fink Eleanor Fink Dorothy Fisher James Foster Michael S. Fried Sue Fuller Norma Lee and Morton Funger Velma and Harry Galblum, D.D.S. Mrs. Johnson Garrett Roberta Geier Lenore F. Gershuny Norman Geske Frank B. Gettings Elene Essary Gill Lilyan Z. Goda Selma Gratz Mary Ellen Guerra George Gurney Corrie Halsey Gloria Shaw Hamilton Walker Hancock R. Philip Hanes, Jr. Margaret Harman Jane and Parker Hart Lynda Roscoe Hartigan Jane Haslem Gallery John Davis Hatch Linda and Jeffrey R. Hayes Mickelson Gallery Ellen G. Miles Lillian B. Miller Barbara B. Millhouse

Louise Heskett Lilly and Manuel Hiller Margaret L. Hodges Sally and Robert Hoffman Wilhelmina and Wallace F. Holladay Hom Gallery Thomas C. Howe Richard H. Howland Caroline H. Hume Embassy of Ireland Edward Jacobson Paula K. Jeffries Suzanne C. Jenkins Elizabeth Johns W. Robert Johnston III Stephen N. Jones, M.D. Ruth Cole Kainen Linda L. Kaplan Enid and Crosby Kemper Foundation Mr. and Mrs. Randolph A. Kidder Elvine R. King Charles H. King, Jr. B. M. Koffler Robert P. Kogod B. R. Kornblatt Gallery, Inc. George P. Kroh Mr. and Mrs. J. Palmer Leeper Lucinda K. Leigh Edward J. Lenkin Thelma Z. Lenkin Eleanor K. Levy William R. and Nora H. Lichtenberg Foundation Inc. Harry Lowe Elvira B. Ludlow Patricia M. Lynagh Amanda F. MacKenzie Millicent F. Mailliard Charles Mailliard Robert Maloy Caryl Marsh Nancy Mowll Mathews C. Thomas May, Jr. Beatrice C. Mayer Cyntia Jaffee McCabe Marie McCarthy The Eugene McDermott Foundation Nan Tucker McEvoy William A. McGonagle McIntosh/Drysdale Gallery Virginia and Marion F. Mecklenburg

Amelia Jean Mix Lillian R. Mones Michael Monroe Morgan Stanley and Company, Inc. Joann G. Moser Munson-Williams-Proctor Institute National Institute for the Conservation of Cultural Property The Newark Museum Association Susan R. Niedzielak Norman Bernstein Management, Inc. Dr. P. B. North Barbara Nosanow Judith O'Sullivan The Overbrook Foundation Ruth A. Oviatt Nora and Fred Panzer Harry S. Parker III Charles Parkhurst Mrs. Jefferson Patterson Mary and James Patton, Jr. Jennifer and Laughlin Phillips Polaroid Corporation Mr. and Mrs. Moyer P. Potamkin Carol Price Print Council of America Ilya Prizel David S. Purvis Rand Corporation Ronald Q. Rankin, Jr. Georgine S. Reed Mary Livingston Ripley S. Dillon Ripley Madeleine S. Ritzenberg Charles J. Robertson III Sara Roby Foundation Israel Rosen M.D. Eleanor T. and Samuel J. Rosenfeld Loretta and Gerald L. Rosenthal Gertrude Rosenthal Wilbur L. Ross, Jr. Derald H. Ruttenberg Edna G. Salant David Saltzman Katharine and Charles H. Sawyer Stefano Scafetta Edith and Robert Schaffer Betty Schulman Tirsa and David W. Scott Jacquelyn D. Serwer

Paul Mellon Thomas M. Messer Jane B. Meyerhoff Marjorie and Joseph Sloane Helen Belding Smith Frances P. Smyth Janet W. Solinger Eloise A. Spaeth Jack C. Spinx Ruth Carter Stevenson Katharine B. Stewart Bonita Sweet Lisa M. Taylor Abigail Terrones Clayton Timbrell Carey Timbrell Time-Life Books, Inc. Marienne E. Tobriner Laura Tuckerman Triest William H. Truettner Anne Truitt Evan H. Turner United Technologies Corporation Ann Nash Upton Volunteer NMAA Docent Program

Margy P. Sharpe Gerald Silk Caroline T. Simmons The Washington Post Company The Washington Print Club Mrs. Paul L. Wattis Mrs. Ruthanna M. Weber Stephen Weil Lee and Leonard Weiss Mrs. Keith S. Wellin Mr. and Mrs. Edwin M. Wheeler Virginia White Franics P. Wilkinson Dave H. Williams Caroline S. Williams John Wilmerding Wilsey Foundation Donna M. Wilson David Wintermann Virginia Bloedel Wright Marilyn and Robert Yassin Barbara Zabel Judith K. Zilczer Hildegarde G. van Roijen

NATIONAL MUSEUM OF AMERICAN HISTORY

Donors to the Collection

- A-Mark Precious Metals Incorporated (through Bruce Kaplan): one-ounce pure silver medallion, Liberty Silver, struck by A-Mark Precious Metals Incorporated (1986.0504).
- John A. Abbott, M.D.: silver tablespoon bearing the mark of a leaping fish, associated with Sir John Franklin's Arctic expedition, mid-19th century (1982.0254).
- Marie Willcox Abbott: report of a shopping trip with 14 fabric samples attached, 19th century (1984.1054).
- Mignon S. Acker: fragment of printed cloth, mid-19th century (1986.0121). Helen L. Ackermann: meter bar in a walnut case replicated by the National Bureau of Standards from the platinum Paris Standard (1985.0819).
- Don Adair: signed reproduction of the official poster for the 1984 Republican National Convention, designed by Mr. Adair (1985.0070).
- Robert McCormick Adams: 8 coins from a 1983 Republic of Panama proof set (1985.0201).
- Rita J. Adrosko: certificate of First Holy Communion and a photograph of Rita Adrosko, both 1939 (1982.0414); 13 miscellaneous Polish-American and Catholic articles made and used for Baptism and First Holy Communion, 1917-18 (1983.0688); 2 pins of the Nocturnal Adoration Society of St. Michael's Church in Elizabeth, New Jersey, 1941-51, and a Singer Manufacturing Company identification tag (1984.0289); girl's necklace, ring, and bar brooch in original box and a girl's bracelet, all 1933-36 (1985.0731); aluminum tray made by Admiration Products Co., New York, 1930s (1986.0079).
- The Aerospace Corporation, Aerophysics Laboratory, Laboratory Operations (through Harold Mirels): nozzle block used for the first demonstration of a continuous wave chemical laser (1985.0147).
- AFL-CIO, George Meany Memorial Archives (through Katherine Vogel): 2 badges; banner, "Be Union! Buy Label!;" hat, "Right to Work is a Rip Off;" button, "Women Power, I Belong;" and a patch, "AFL-CIO Auxiliaries," all relating to the AFL-CIO (1985.0950).
- AFL-CIO, Laundry and Dry Cleaning International Union (through Sam H. Begler): patch, money clip, button, pen, shop card, and a sheet of stationery for the Laundry and Dry Cleaning International Union (1986.0350).
- Elena Agnini: Fisher "Space" ball-point pen (1985.0654).
- Richard E. Ahlborn: pine drain board for a cheese press made and used by the Spanish of northern New Mexico, 1890-1940 (1981.0736); photograph in tramp-art frame "Booney Forge and Tool Works Clam Bake...1937" (1984.0814); 4 engravings from Harper's Weekly, 1874; an engraving of the "Map of the Pilgrim's Progress," 1850; and a chromolithograph of "St. Rita of Cascia," ca. 1900, all with religious themes (1985.0303).
- Anjum Sultana Ahmed: 15 stamps and a cut corner of a stamped envelope, all from the Indian Princely State of Hyderabad (1985.0567); 3 bank notes of the Indian Princely State of Hyderabad, 1939-53 issues (1985.0603).
- Lucien Aigner: black and white gelatin print of a self-portrait by Mr. Aigner, 1932 (1985.0925).
- Aircraft Mechanics Fraternal Association (through Robert L. Ruzensky): 4 stickers, a sheet of letterhead and envelope, bumper sticker, pamphlet, patch, button, and a pen top, all relating to the Aircraft Mechanics Fraternal Association (1986.0331).

- Government of Aitutaki, Post Office, Philatelic Bureau: 11 mint stamps and souvenir sheets of Aitutaki (1983.0214); 4 mint stamps, a souvenir sheet, and a first day cover of Aitutaki (1983.0443); 15 mint stamps of Aitutaki (1984.0333); 11 mint stamps, 2 souvenir sheets, and 2 first day covers of Aitutaki (1984.0929); 12 mint stamps, 4 souvenir sheets, and 3 first day covers of Aitutaki (1985.0046); 3 mint stamps and a souvenir sheet of Aitutaki (1985.0716).
- Alaric Textiles International (through Robert E. Fatherley): segment of reproduction fabric commemorating the Chicago World's Fair of 1892 manufactured by Alaric Textiles International, ca. 1976 (1985.0833).
- Stephen Album: 31 California tokens and medals (1986.0184).
- Ms. Laura Albus: 3 issues of <u>Song Hits</u> magazine and 10 issues of <u>Hit Parader</u> magazine (1985.0888).
- William B. Alexander V: 2 bookbinding presses and a bookbinding die (314493).
- Aluminum, Brick, Glass Workers (through H. Max Webster): 4 lapel pins, 2 pens, 2 patches, and a button, all relating to the Aluminum, Brick, Glass Workers (1986.0345).
- American Agriculture Movement, Inc. (through Clifford Hamilton and Gerald McCathern): International Harvester Model 1486 tractor made in 1979 and 21 state flags (1986.0179).
- American Association of University Professors, Collective Bargaining Congress (through Peggy Quinn): 4 sheets of stationery, 2 pamphlets, 2 leaflets, a newsletter, button, handbook, and a book, all relating to the American Association of University Professors, Collective Bargaining Congress (1986.0361).
- American Bank Note Company (through Robert F. Ivey): 2,880 postage stamps, postal stationery, die proofs, and correspondence comprising the Hawaiian postal history archives (1984.0372); (through E. Peter Campbell): 6 hologram samples including pictures of Pegasus and the Master Charge logo and a National Geographic Magazine cover (1985.0276).
- American Broadcasting Companies, Inc., Daytime Television Division (through Isadore Miller): miniature carousel and a gold pocket watch from the daytime television series, "The Edge of Night" (1984.0202).
- American Cyanamid Company (through Warren Highman): 2 oil paintings, The First American Steam Locomotive by Mort Kunstler, 1972, and The First Auto Race in America 1895 by Robert Schulz, 1978 (1985.0875).
- American Express Travel Related Services Company, Inc. (through James Li): credit authorization terminal, travelers cheque dispenser, and a power cord modem (1984.0151).
- American Federation of Government Employees AFL-CIO (through J. Gary DiNunno): videotape cassette Across America and a packet of documentary information about the union, 1985 (1985.0458).
- American Federation of Grain Millers (through Larry R. Jackson): 8 items relating to the American Federation of Grain Millers including decals, buttons, lapel pins, and stationery (1986.0239).
- American Federation of State, County, and Municipal Employees (through William Lucy): 2 buttons, a sheet of stationery, and an envelope for the American Federation of State, County, and Municipal Employees (1986.0336).
- American Flint Glass Workers Union (through Ivan T. Uncapher): 5 buttons, a sheet of stationery, lapel pin, union seal, and a label all relating to the American Flint Glass Workers Union (1986.0272).
- American Numismatic Association (through Edward C. Rochette): 2 medals commemorating the 93rd anniversary convention of the American Numismatic Association, 1984 (1984.0765); (through Q. David Bowers): copy of a

- Lesher dollar, 1984 (1984.0926); (through Ruthann Brettell): 2 American Numismatic Association convention exhibition medals (1985.0742).
- American Nurses' Association, Inc. (through Pamela A. Ames): lapel pin,
 "REPRESENTING NURSES IS OUR BUSINESS/AMERICAN NURSES' ASSOCIATION" and a
 sheet of stationery from the American Nurses' Association, Inc.
 (1986.0261).
- American Political Items Collectors (through Norman B. Loewenstern): 6 posters collected during the Republican National Convention in Dallas, Texas, 1984 (1984.0905).
- American Satellite Corporation (through John W. Townsend, Jr.): parabolic microwave antenna and off-set printing plate (1979.1220).
- American Society of Civil Engineers (through Herbert R. Hands): sample of portland cement, ca. 1850, from a wall of the London home of William Aspdin, son of Joseph Aspdin who invented portland cement (1985.0928).
- Amoco Motor Club, Division of Amoco Enterprises, Inc. (through Paul C. Morbit, Jr.): sign, "As You Travel Ask Us" (1985.0429).
- Carl E. Andersen on behalf of the Andersen Family: optical device used to measure eyeglasses, manufactured by Runge & Laulfus of Rothenau, Germany (1984.0641).
- Rev. George M. Anderson, S. J.: pine and cherry pew bench from St. Aloysius Church in Washington, D.C., 1859 (1985.0728).
- Ida M. Savoy Anderson: infant's christening dress worn by Alberta Lewis and made by the donor's aunt and godmother, Elizabeth Keckley, 1866 (1983.0853).
- Edna Andrus: 2-piece robe worn by Stewart Andrus from 1916 to 1984 (1985.0191). Eleanor K. Annett: 112 U.S. and foreign covers, 5 maximum cards, and 2 souvenir sheets, all relating to the observance of the International Geophysical Year, 1957-58 (1984.0047).
- Anonymous: Peruvian tar pot (279719); 112 items of American, English, and European glass from the 18th through the 20th centuries (1981.0558); Hejaz coin dated 1909 and a silver bracelet with 6 Indian bronze coins (1985.0703); (through John P. Burnham): 414 U.S. and foreign tokens, medals, badges, store cards, and ribbons (1983.0492).
- Government of Antigua, Barbuda Dependency, Barbuda Post Office, Philatelic Bureau: 15 mint stamps and 4 first day covers of Barbuda (1983.0215); 12 mint stamps and 3 first day covers of Barbuda (1983.0442); 14 mint stamps and 2 first day covers of Barbuda (1984.0051); 35 mint stamps and 8 first day covers of Barbuda (1984.0755).
- Antonucci and Lawless (through R. Antonucci and R. Lawless): residential central vacuum cleaner system with a cleaner unit, electric motor, muffler, and a baseboard hose coupling, made by the Vacuum Cleaner Company of New York, ca. 1910 (1985.0277).
- Apple Computer (through Alfred J. Mandel and John Sculley): MacIntosh computer system made up of the computer and keyboard, 6 stickers, 3 diskettes, 2 documents, and a cassette (1985.0118).
- Richard T. Applebaugh: telegraph key in case used by Sgt. Maj. William K. Applebaugh of the Union Army Signal Corps during the Civil War (1985.0183).
- Aristotle Industries (through John Aristotle Phillips): videotape, "Campaigns and Computers" and a notebook, "Al Campaign Manager User's Guide" (1986.0064).
- Vicki Loren Armour: 10 pieces of polo clothing and equipment (1984.0567); silver polo trophy, "Father-Son Winner/1984/Vicki L. Armour" (1935.0507). Christian Arne: scale model of an elevated Fort Dodge water storage tank

- originally built by Chicago Bridge and Iron Company, Iowa, 1894, and an oxygen-acetylene cutting torch, ca. 1920 (1985.0549).
- Estate of Mrs. Blanche Arthur in memory of Wilson Arthur (through Phyllis Lytle): 7 U.S. Army service documents from the military career of Mr. Arthur, a veteran of the Spanish-American War, and gravesite registration letter for Mrs. Arthur dated April 7, 1975 (1982.0126).
- William R. Asadorian: cast copy of a Spanish-American 8-reales coin struck at Mexico City, dated 1775 (1985.0899); copper Miles' patent oil lamp, 1787 (1986.0022).
- ASARCO, Inc., Central Research Department (through Val Kudryk): copper wirebar from which fine wire would be drawn, manufactured at ASARCO's Baltimore refinery in 1972 (1985.0744).
- Mrs. Rochelle D. Aschheim: 4 medicine tins, manufactured by Boots Drug Company, Ltd. of Nottingham, England (1983.0607); 4 figures made of cloth and fiber portraying a woman, an old man, a boy in short pants, and a dog on a leash (1983.0684); box of 5 lingerie "Excella" ribbons (1985.0383); 2 embroidered monograms purchased from J. Daversin of Paris, France in 1908 (1985.0773); clothing sachet (1986.0047); 6 placemats, "NIXON'S THE ONE!" and a record, "NIXON'S THE ONE" sung by Connie Francis (1986.0142); typewriter ribbon box (1986.0297).
- Jack B. and Wadonna M. Ashcraft: 3 pieces of political campaign bunting and a button, "Eleanor/Start Packing/The Wilkies are Coming" (1985.0896); fragment of printed cotton fabric with Japanese-inspired motifs and a length of printed cotton fabric with leaves and ferns on red ground, both late 19th century (1985.0897).
- Burton E. Ashley: cartridge box labeled "Flobert, Sellier & Bellot" made in Czechoslovakia (1982.0480).
- Richard L. Ashworth: black leather tool bag and a rabbit hair brush, both used in servicing a Xerox model 914 copier (1985.0923).
- Association of Civilian Technicians (through John T. Hunter): 2 buttons and a sheet of letterhead with the Association of Civilian Technicians' logo (1986.0333).
- Astra Pharmaceutical Products, Inc. (through Steven A. Hume): set of 2 Duo-Trach kits used for endotracheal anesthesia (1983.0739).
- AT&T-Bell Laboratories (through Marcy G. Goldstein): hand-wired hybrid integrated circuit (1984.0321).
- AT&T Technologies (through John J. Grieff): electronic artificial larynx (1984.0633).
- Atchinson, Topeka, and Santa Fe Railroad Company (through R. N. Crow and J. R. Fitzgerald): clock dial for standard clock and a placard set for a standard clock (1985.0193).
- Atlanta Cutlery Corporation (through William C. Adams): 7 pieces of a bridle cutter pike of the Confederate Army, excavated in South Carolina in 1980 (1983.0699).
- Atlantic Independent Union (through John W. Kerr): 9 items relating to the Atlantic Independent Union including posters, buttons, and stationery (1986.0240).
- Henry A. Ator: set of 2 Freeman transorbital leucotomes in their original cases, a set of 2 Freeman orbitoclasts in their original case,
 Watts-Freeman precision leucotome, Watts-Freeman radial stab-incisor, and
 a Watts carotid artery carotoid compressor, all ca. 1950 (1986.0376).
- William F. Augustine: bronze medallion featuring a facsimile of President Calvin Coolidge, ca. 1927 (1985.0616).
- Ann Auman: 7 postage stamps of Zanzibar (1984.0512).

- Hubert Geese Ausbie: basketball shirt marked "Harlem Globetrotters," "Ausbie," and "35" (1985.0198).
- Dr. Herbert Axelrod: 2 cello bows by Voirin in Paris, France, 19th century (1986.0549).
- Estate of Alice Ayvad (through Andrew G. Borden, Sr.): telephoto Cycle-Poco 3 view camera with 6 plate holders (1986.0105).
- Dr. Frances E. Baker and Dr. Gladys E. Baker: 2 academic hoods of the University of Chicago, 1910 and 1934, and a photograph of Dr. Richard P. Baker, 1935 (1985.0820).
- Sandy Dewey Baker for the Ronald M. Baker Family: 3 phonorecords of songs by the Beatles (1986.0016).
- Bakery, Confectionery, and Tobacco Workers International Union (through Rene Rondou): 2 sheets of stationery, a lapel pin, and a sheet of 17 union labels, all for the Bakery, Confectionery and Tobacco Workers International Union (1986.0266).
- Leonard F. Ball: 2 individual chemical prophylactic packet kits provided by U.S. Army during WW II (1984.0597).
- Bally Manufacturing Corporation (through Glenn K. Seidenfeld, Jr.): "Pac Man" video game (1984.0889).
- Baltimore Orioles (through Henry J. Peters): baseball uniform and catcher's equipment used by Baltimore Orioles' catcher Rick Dempsey, including a pair of tube-stirrup socks, pair of knee-length socks, pair of pants, shirt, cap, chest pad, pair of knee pads, and a protective mask (1985.0057).
- Donald O. Barber: 17 pieces of uniform items, insignia, identification tags, charts, buttons, and schrapnel belonging to Sergeant James A. Barber while a member of the 1st Anti-Aircraft Machine Gun Battalion, 1915-20 (1986.0174).
- Breese F. and Mark Barbour: windlass made by the Globe Iron Works and used on the schooner <u>John Burt</u>, ca. 1871, which sank in Lake Ontario in September 1892 (1983.0586).
- Conrad Voss Bark: man's razor and 4 blades in original case, patented May 28, 1907 (1984.0375).
- Theodore Barnes (through Paul W. Kleinsmith): 26,661 stamps, 1,130 covers, 97 stamped envelopes, 74 miscellaneous postal items, 71 postal cards, and a Confederate States of America \$20.00 bill (1984.0173).
- Charlene Barnes: 20 uniform items, insignia, medals, and memorabilia of Audie Leon Murphy from his service in the U.S. Army during WW II (1985.0428).
- Bass Wingates Band (through G. Rouse): phonorecord, "Sparkling Brass," autographed by the bandmembers and a pewter plate inscribed with arms and "Balton" (1984.0851).
- Sam G. Bass, Jr.: sidewinder model submachine gun with 2 magazines (1984.0871).
 Joel B. Bastow: 20 gelatin glass plate negatives of mainly Bastow family members, ca. 1900 (1986.0200).
- Battelle Memorial Institute, Columbus Laboratories (through F. Michael Lory): electron diffraction camera built at Cornell University by H. R. Nelson and A. G. Emslie and its electronic control cabinet, ca. 1930 (1980.0256).
- Gary Bates: "AAA, Montana Auto Association Emergency Service" sign (1984.0715). Wm. H. Bayless: sheet of 54 stamps of Scott 1394 with a tagging error (1985.0346).
- Bruce Bazelon: 42 pewter buttons excavated from Revolutionary War period sites (1977.1139); in memory of Thomas W. Owens, Jr.: officer's uniform; button from the British 44th Regiment of Foot, 1812; and 2 documents given to Cpl. Guy A. Brosius in 1913 (1984.0476); 4 pieces of U.S Army insignia

- and an album containing various examples of U.S. Navy insignia and a Revolutionary War period British Navy button, all 1776-1960s, and a booklet about U.S. Navy officer's uniform and equipment of 1917 (1985.0110).
- Jonathan D. Beard: Spencer carbine, ca. 1860 (1985.0870).
- Comdr. Eldon L. Beavers: 8-piece U.S. Coast Guard service dress green uniform, 1966-82 (1985.0184).
- Evelyn Bebout: Bolsey model B2 camera with leather case (1986.0385).
- Clarence J. Beck: United States Quarter Eagle, 1911-D, probably counterfeit (1986.0197).
- Don Bell: saddle for riding broncos, 1949 (1984.0931).
- James L. Bellis: 5 WW II identification tags and an empty "Hoxi Bullets" cartridge box (1982.0176).
- Jean I. Benjamin: pennant of the National Labor Service of Nazi Germany, 1933-45 (1985.0452).
- Edwin Bennett: Anson Mills type belt plate with Balloon Pilot design, non-regulation pattern, ca. 1950 (1983.0356).
- Jane M. Bennett: tintype of Colonel Marion and Daniel Lothrop and a memorial card for Daniel Lothrop, "Died Feb 18 1899" (1986.0135).
- Ivan B. Berger: Altair 8800b personal computer, 1976, with 6 pieces of related hardware, 11 sets of software and books, and a set of spare parts (1985.0647).
- R. Berks: John F. Kennedy Memorial Medal, 1968 (1985.0824).
- Conrad L. and Natalie Berman: cast replica of U.S. Morgan dollar, 1921 (1985.0002).
- Mr. and Mrs. George W. Bernardo in honor of their children, Charline, Georgeann, James, and Sharon: 2 face screens of silk applied to paper, late 18th century, and an appliqued, pieced, and embroidered counterpane dated 1795, all made by Eliza Bennis; a miniature watercolor portrait of Mrs. Bennis dated 1782; and a watercolor portrait of her husband, Thomas Bennis, dated 1789 (1985.0034).
- Ardyth Bernstein and Esther Bafsky Lozoya: "Hollywood Bloomer Girls" professional baseball uniform including a shirt, pants, leggings, cap, and shoes, ca. 1930 (1985.0169).
- Leonidas H. Berry, M.D.: pocket surgical kit owned by Bishop Cornelius Thaddeus Shaffer, late 19th century; hypodermic surgical kit with needles and drugs, early 20th century; modified biopsy gastroscope in case, ca. 1950; and a framed picture of Dr. Berry at the 1954 World Congress of Gastroenterology (1986.0406).
- Murray Bersten: 3 pen points, 3 books, a photograph, and a pen holder, all relating to Austin N. Palmer, founder of the "Palmer Method" of handwriting (1985.0396).
- Robert Bery: polo trophy medallion from the "Gulf Stream Ladies Invitational, 1984" (1984.0934).
- Linda Besade: woman's polo shirt (1984.0898).
- Arthur J. Bessen: heater used by Mr. Bessen, a rural letter carrier, while delivering mail, 1917-1965 (1985.0209).
- John E. Bianchi: U.S. Army General Officer's belt with buckle, pistol holster, and magazine pouch (1983.0885).
- David E. Biggar II and Denise L. Biggar: postal cover with U.S. postage stamp used from Shanghai, China without the customary surcharge for Shanghai offices, cancelled November 7, 1921 (1985.0723).
- Stanley K. Bigman: 279 pieces of paper memorabilia from various U.S. political elections (1984.1104),

- Billie Billing: woman's Professional Billiard Alliance T-shirt (1984.0566).
- Stephen J. Bilsbury: 4 cartridges, a group of cartridge cases, group of unfinished cartridge cases, group of penetrator projectiles, and a group of flechettes (1983.0767).
- William L. Bird, Jr.: instruction book of The Art of Short-Hand Writing, printed in Philadelphia in 1830 (1986.0044); phonorecord of "The Chipmunk Song" (1986.0308).
- Joan C. Birdsall: portrait of Tunis A. Craven, commanding officer of the monitor <u>Tecumseh</u> which sank in Mobile Bay during the Civil War (1985.0051).
- William C. Birely: .410 gauge specimen gatherer pistol made by J. Stevens Arms Company, Chicopee, Massachusetts (1983.0862).
- Bitonte Contact Lens Service (through Joseph L. Bitonte): 6 different types of contact lenses (1984.0836).
- Mrs. William McCormick Blair, Jr.: woman's half-slip by Balenciaga, 1958-59 (1985.0919).
- Mel J. Blanc: 4 animation cells of "The Flintstones," "Bugs Bunny,"
 "Sylvester," and "The Jetsons," and a Mexican hat and serape used in Mr.
 Blanc's "Si-Sy" routine with Jack Benny (1985.0247).
- Regina Blaszczyk: Girl Scout pin and canteen with cover used in 1966-67 at Holy Trinity School in Lawrence, Massachusetts (1985.0400).
- Susan B. Bliss: woman's brooch and matching earrings in original box, 1870-90 (1985.0091).
- Nick Bloom Uniform Company, Inc. (through Barry M. Levontin): 6-piece U.S. Postal Service letter carrier's uniform (1985.0857).
- Bluth Group, Limited (through Don Bluth and Gary W. Goldman): "Space Ace" laser disc (1985.0072).
- Richard A. Boardman: print made for the U.S. Centennial, 1876 (1985.0071). Norman F. Boas, M.D.: original cardiotachometer developed by Dr. Ernest P.
- Boas in 1928 to record heart rate, 2 signal recorders, an amplifier, battery charger, and a Boas-Allied cardiotachometer (1984.0638).
- Benjamin Bock: playbill for Ethel Barrymore in "The School for Scandal," February 15, 1932, at the Schubert-Belasco Theatre in Washington, D.C. (1985.0007).
- Alfred S. Boerger: 13 covers which highlight the progress made in U.S. postal automation (1984.1019).
- Frank P. Bolden: pictorial history book about the U.S. Navy, 1775-1914 (1984.0535).
- Mrs. Luis Bolin: 37-star U.S. flag used by Senator John Sherman at his Mansfield, Ohio home, late 19th century (1984.0354).
- John Bolt, Jonathan and Sally Rickerman, and Teal Rizzo: 2 bumper stickers and a banner, "PEACE is a group EFFORT" (1986.0008).
- Eugene P. Bonstein, Jr.: 90 88-note player piano rolls, 1916-48 (1985.0430). Peter N. Borsi: home-built amateur radio transmitter (1981.0900).
- Dr. George D. Botts, Jr.: electrical oil sterilizer for dental instruments (1983.0745).
- Alice L. Boundy: "Bryan Dollar" token from the 1896 presidental campaign of William Jennings Bryan, found in a garden in Goderich, Ontario, Canada in 1922 (1984.0772).
- Doris M. Bowman: 4 stereo cards, 2 bed curtains, 2 lengths damask fabric, a damask dresser scarf, damask napkin, baby dress, paisley shawl, bed

101

- cover, pillow, and a silk bed cover (1985.0381).
- Helen King Boyer: ink drawing of "The Twenty Second Street Bridge on October Eighth Nineteen Eleven" and a pencil drawing of "Panther Hollow Bridge" by Ernest Willson Boyer of Pittsburgh, Pennsylvania, ca. 1912 (1985.0790).
- Thomas L. Bradley and John Sena: 4 medals commemorating the Tucson Coin Club's 22nd Annual Coin & Stamp Show, January 10, 11, and 12, 1986 (1986.0158).
- The Branford Electric Railway Association (through Albert Hirsch): cacheted cover commemorating the first public run of Union Street Railway's Railway Post Office car 302 on October 17, 1981, at East Haven Connecticut (1984.0383).
- Doris H. Bratten: 456 pieces of dental equipment and furniture from the office of Roscoe C. Bratten, D.D.S., who practiced in Ohio from 1915 to 1966 (312608).
- Ruth Braun: 55 menus, photographs, and documents relating to Braun's Fine Caterers, Inc. and their work at receptions and dinners at the White House, State Department, and various embassies in Washington, D.C., mid-20th century (1985.0461).
- Robert D. Breneller, Irving A. Eisen, and Stuart T. Eisen: 40 Indian "bent-bar" satamana coins, 600-303 B.C. (1986.0572).
- Church of the Brethern General Office, Brethern Volunteer Service Orientation (through Brian Harley and Kyle Richmond): banner, "To Protest Is To Hope," from the August 4, 1985 Peace Ribbon rally in Washington, D.C. (1985.0946).
- George W. Brett: twine knife used in the railway mail service (1986.0497). Brigham and Women's Hospital, Peter Bent Brigham School of Nursing (through Marion L. Metcalf, R.N. and H. Richard Nesson, M.D.): student uniform, ca. 1912-25, a graduate nurse's uniform, ca. 1940-85, a school pin designed by Tiffany belonging to Lucy H. Beal, Superintendent of Nurses and Principal of the School of Nursing, and a sepia portrait of Carrie Hall, founder of the Peter Bent Brigham School of Nursing (1986.0081).
- Margaret Hoover Brigham: 3 evening gowns and 2 day dresses worn by Lou Henry Hoover, wife of President Herbert Hoover (1985.0388).
- S. C. Brightman: 15 issues of the newspaper, <u>The Democrat</u>, 1952 and a special edition of the newspaper, The Record, October 1952 (1985.0124).
- Doris M. Brixey (through Morgan Guaranty Trust Company of New York and Henry Pildner, Jr.): necklace, brooch, and bracelet set made up of 28 U.S. gold coins with 5 of the coins surrounded by diamonds, designed by David Webb (1984.0603).
- Nathaniel R. Bronson II, M.D.: inventor's prototype of a B-scan Ultra Sonoscope (1986.0095).
- The 1983 Brooklyn Bridge Centennial Commission, Inc. (through Richard G. Perry): set of eyebar diagonals, set of eyebar counters, set of connecting pins, and a "U" bolt, all removed from the Brooklyn Bridge, ca. 1985 (1986.0393).
- Brotherhood of Locomotive Engineers (through John D. Rinehart and John F. Sytsma): 2 patches and 2 buttons all relating to the Brotherhood of Locomotive Engineers (1986.0262).
- Brotherhood of Railway, Airline and Steamship Clerks, Freight Handlers, Express and Station Employees, AFL-CIO-CLC (through R. I. Kilroy): 2 sheets of stationery and a lapel pin from the Brotherhood of Railway and Airline Clerks (1986.0343).
- Brotherhood Railway Carmen of the U.S. and Canada (through C. E. Wheeler): 4 pootlets, 2 union labels, 2 window decals, 2 stickers, 2 buttons, and 2 patches, all relating to the Brotherhood Railway Carmen of the U.S. and

- Canada (1986.0140).
- Gerald Brown and Jack H. Tod: 132 standard porcelain insulators (1936.0006).
- James H. Bruns: 2 brass Rural Free Delivery locks, ca. 1910 (1984.0824); bell-shaped Rural Free Delivery mailbox, ca. 1913 (1984.0982).
- Harry T. Bryer: rustic-style wall rack made of nailed willow twigs, 1920s-30s (1985.0123).
- Emily B. Buchanan: 11 magazines and magazine covers of The Silver Screen, 1922-23 (1986.0460).
- George G. Bull: 500-<u>lira</u> coin with braille writing, Italy, 1984 (1984.0892). Catherine E. Bullowa: 3 U.S. Mint date punches for 1859, 1885, and 1893 (1985.0704).
- Jane W. Bunting: Afro-American coil basket with cover made by Mary Jane Manigault of South Carolina (319865).
- Martin Burke: bottle of 24 Bayer aspirin tablets, Atkinson & Barker's infant's grippe mixture, tube of Colgate dental creme, and a Dynamed disposable obstetrical kit, all 1978-79 (1982.0003).
- The Rev. Carl Thomas Burkhardt and Lois Mall Burkhardt: Log Cabin newspaper dated July 25, 1840, published by Horace Greeley as part of the presidential campaign of William Henry Harrison (1984.0860).
- Thelma C. Burnett: 2 memorial cards announcing the deaths of Abraham Lincoln and Ulysses S. Grant (1986.0141).
- Elmer E. Burruss, Jr. and Edward A. Joachim: section of wrought iron "U" rail, ca. 1850 (1985.0079).
- Frank B. Bushey: 7 panels from a circus show ticket wagon titled "Uncle Tom's Cabin and Menagerie," early 20th century (1986.0180).
- Dr. Boris B. Bushwick: cabinet for dental instruments and a high-speed water-driven drill with pumping unit (1985.0219).
- Miley Busiek and Robert A. Glen: artist's proof of the bronze sculpture, "Together in Unity" (1985.0889).
- Butler Enterprises, Inc. (through Joanne B. Butler): toilet seat band, paper shower slipper, and a paper shower treader, all 1950s (1984.0441).
- David S. Butler: Spanish pistol and 6 boxes of ammunition (1984.1129).
- Harry F. Byrd, Jr. and Margaret Byrd Stimpson: rigged model of the Coast Guard cutter Bear (1985.0010).
- Barbara H. Calhoun: 3 pairs of spring-loaded scissors and 2 forceps used in eye surgery (1984.0820).
- Campaign Against Nuclear War (through Anne B. Zill): 2 nuclear war prevention manuals (1983.0271).
- Leopoldo Cancio: 15 Spanish-American reales coins made at the Potosi and Mexico mints, 16th and 17th centuries (1984.0764); 4 bronze medals commemorating World Bank projects in Israel, Brazil, Guinea-Bissau, and Peru, 1960s and 1970s (1984.0768); 4 8-reales and a 4-reales Spanish-American Colonial silver coins struck in Potosi (1984.0964); 5 Umayyad and Ayyubid coins (1984.0988); silver medal from Brazil, 1976 (1984.1108); 11 Spanish Umayyad silver coins, 10th century (1985.0542); 5 medieval Turcoman coins (1985.0604); 10 Islamic silver coins of the 8th and 9th centuries (1985.0657); 73 ancient bronze coins (1985.0705); 3 ancient Greek silver coins (1985.0719); Scytho-Parthian coin, A.D. 30-60 (1985.0757); Sicilian bronze coin, 3rd century B.C. (1985.0825).
- Employees of the Cannon Mills Company (through Ray Beaver): 6 badges, 2 newspaper clippings, anti-union bulletins, a bumper sticker, and a T-Shirt all relating to the non-unionization of the Cannon Mills Company (1986.0241).
- Jack S. Cargill: 2 sets of photographs and a set of pamphlets documenting the

- Bayard Mine-Mill Local 890 strike and the Empire Zinc strike (1985.0171). Benson Carlin: pulse echo brain scanner (1984.1027).
- Pamela A. Carlin and Evelyn A. Mark in memory of William T. Armstrong: theatre orchestra drum set with sound effect devices played by Mr. Armstrong in vaudeville and silent film theatres (1984.0335).
- Carnegie Institution: 6 galvanometers, 3 dip circles, 3 potentiometers, 2 magnetometers, a declinometer, surveying instrument, induction coil, cosmic ray meter, electrometer, and a sunshine recorder (1983.0039).
- Walter A. Carpus: 2 pairs of brown U.S. Army shoes and a leather flying helmet, WW II (1984.0534).
- F. Winfrey Carter: phonograph record titled, "Sincerely, Kate Smith," with 14 reissued recordings, 1930-34 (1985.0607); 12 phonographic recordings of Kate Smith and 7 pieces of sheet music of songs made popular by Kate Smith (1985.0810).
- Anna Casetta: woman's nightgown and robe made in the Philippines in 1945 from parachute nylon and decorated with parachute cord (1985.0664).
- Russell K. Cashdollar: gas street lamp timer (1984.0555).
- Mrs. Catherine B. Cass: 20 prayer cards (1983.0823).
- Betty Catlin: sample of E. M. Crandal telegraph splice barbed wire, patented May 24, 1881 (1981.0844).
- Centurion Industries Incorporated (through Eric F. Burtis): "Digitor" arithmetic teaching machine with a teacher's manual and a service manual, 1974-75 (1986.0507).
- James G. Chandler: white damask linen napkin with a center design of ferns and leaves, borders of a repeated floral motif, and "T.P.C. 1881" hand-lettered in black ink (1985.0772).
- Mrs. Kenneth Chapin: 47 pieces of sheet music (1984.0568).
- Ann Chase: cibachrome print of a pansy taken by a Kirlian machine (1985.0924).
- Shirley E. Cherkasky: pencil marked "Harry Truman Said It, Dick The Bug Stops Here" (1985.0127); jacket for U.S. War Bonds and a holder containing ration books and documents (1985.0528).
- Chesapeake & Potomac Telephone Company (through Leo O'Connor): 52 pieces of telephone apparatus (1980.0277).
- Chicago Historical Society (through Teresa Krutz): 7 flags and pennants used during the Civil War, the Spanish-American War, and WW I and a foam rubber relief map used by Admiral Charles Andrews, Jr. to plan the attack on Iwo Jima during WW II (1984.0600).
- Government of the Republic of China, The Philatelic Department, Directorate General of Posts: 27 specimen stamps, 18 mint stamps, and 18 first day covers of the Republic of China (1985.0074); (through E. K. Chien): 113 mint stamps, specimen stamps, souvenir sheets, and first day covers of the Republic of China (1983.0439); (through John S. T. Wang): 91 mint and specimen stamps and 16 first day covers of the Republic of China (1984.0119); 109 mint and specimen stamps, 22 first day covers, and 5 souvenir sheets of the Republic of China (1984.0629).
- Christmas Seal League of Southwestern Pennsylvania (through Frank J. Donahue): 420 seals in 10 sheets of 1983 Christmas Seals (1983.0561).
- Dr. Lloyd E. Church: McKesson anethesia machine on stand with adult-sized and child-sized masks, gold melting pan, dental lamp, and casting apparatus for gold molds (1985.0629).
- The Citadel, The Military College of South Carolina (through Comdr. Mal J. Collet and Maj. Gen. James A. Grimsley): 3-piece uniform worn by General Mark W. Clark while commander of the Far East Command, ca. 1953 (1985.0356).

- Elvira E. Clain-Stefanelli: medal issued by the Societe Metallurgique Nickel, Presidential Inaugural Committee badge for Nixon and Agnew, January 20, 1969, and a medal noting the 80th Anniversary Convention of the American Numismatic Association, August 1971 (1984.0794); 8 metal tokens from Brazil and Africa, used for loading boats and as necessity money, 1883 (1984.1110); 9 certificates of debt, one of which was used as a cover letter, and a \$20.00 Confederate note (1985.0722); 20 assorted credit cards issued to Dr. Vladimir Clain-Stefanelli (1985.0823).
- Cleveland Public Library (through Marian A. Hultner): 16 political campaign buttons, 6 lapel pins, a proclamation, ticket, pamphlet, program, leaflet, and a letter (1985.0150); (through Ethel L. Robinson): 6 Confederate bonds, a U.S. Treasury note dated October 3, 1780, and a bankruptcy note from England dated 1776 (1985.0286); 9 documents relating to German and German-American immigrants, 19th century (1985.0332); cotton scarf depicting 19th-century cavalry capturing French hot air balloons (1985.0842); letter from Paymaster John R. Martin of the USS Boston in Manila Bay, Philippine Islands, dated August 9, 1898 (1985.0843).
- Francis E. Clougherty: "Reagan Time" watch with a picture of Ronald Reagan on the face, designed by Leopoldine, Countess Arco-Valey-Stengel of Hanover, West Germany in support of President Reagan's 1984 campaign (1984.0868).
- Steven A. Clyburn: Mason jar mousetrap, early 20th century (1985.0847).
- Mr. William Cochran (through Edith Cochran Sethness): set of gold dentures belonging to Mrs. Henriette Cochran, 1844-1931 (1981.0448).
- Barbara J. Coffee: pair of woman's ceramic cuff buttons, 1900-20 (1985.0670); issue of LIFE magazine, dated May 29, 1939, with an article on Eleanor Roosevelt, "Queen's Hostess" (1986.0440).
- Coherent Inc., General Electric Company (through Edwina DeRousse): 11 samples of objects made and cut with a laser (1985.0266).
- Marcus Cohn: 2 man's bow ties (1985.0921).
- William H. Cohrs: porthole fixture for window or portlight, recovered from an unidentified wreck in Lake Huron, 1978 (1984.0039).
- Williams H. Cohrs and John N. Steele: anchor and capstan of the <u>Indiana</u>, 1848 (1984.0359).
- Barbara Cole: "Dewey and Warren" badge and a "Dewey Victory Special PRESS" button worn by Mrs. Cole during Thomas Dewey's presidential campaign in 1948 (1985.0242).
- Emerson Coleman: 6 necklaces, 2 hats, a bag, and a stole, all African-American man's accessories, 1972-76 (1984.1033).
- Herbert R. Collins: 11 milk bottles (1984.0290).
- W. H. Collinson: 3-piece U.S. Naval Academy Midshipman's dress blue uniform worn by A. W. Cruse, WW I period, and a suitcase with clothing rod (1985.0326).
- Colombo Medaglie (through Damiano Colombo): 2 Saint Elizabeth Ann Seton commemorative medals (1985.0520).
- Columbus and Greenville Railway, Inc. (through Sam Y. Wilhite): Model T Ford automobile built in 1926 and refitted with ruckstell axles and 4 steel wheels for use as a railway inspection car, 1927-28, also equipped with 4 rubber road tires and a motometer (1984.0831).
- The Committee for the 50th American Presidential Inaugural (through Jerry L. Wallace): 5 Reagan Inaugural medals (1985.0287).
- John P. Conlon: 3 pairs of wool socks, an enlisted man's wool cap, 1920s, and a pair of mountain ski boots with rubber cleated soles, 1943 (1986.0049).
- Charlene E. Connelly: button marked "I Have A Dream/Dr. Martin Luther King,

- Jr.* (1985.0131).
- Marie Ross Conrad: signaling horn used during the American Revolution (1983.0701).
- Consolidated Edison Company of New York, Inc. (through Edward W. Livingston): switchboard from the West 26th Street substation in New York City (1980.0405).
- Contemporary Concepts International, Inc. (through Ann Watters Becker and Ann Sullivan Ewoldt): 2 handmade porcelain bow ties marked "Reagan/Bush '84" (1985.0415).
- Control Data (through Mollie P. Houns): He-Ne laser with optical assembly and oscillating scanner mirror (1985.0037).
- Galen G. Cook: board game titled "Campaign: A Strategic Race for the American Presidency" developed by Mr. Cook in 1983 (1984.0903).
- Government of the Cook Islands, Ministry of Posts, Philatelic Bureau, Post Office: 12 mint stamps and 2 souvenir sheets of the Cook Islands (1983.0521); 28 mint stamps, 2 souvenir sheets, and a first day cover of the Cook Islands (1984.0008); 15 mint sheets, 2 first day covers, and a souvenir sheet of the Cook Islands (1984.0928); 11 mint stamps, 4 souvenir sheets, and 2 first day covers of the Cook Islands (1985.0047); 21 mint stamps, 10 souvenir sheets, and 3 first day covers of the Cook Islands (1985.0566).
- Stephen W. Cooley on behalf of the Cooley Family: pamphlet, "Facts and Figures Relating to the Presidential Campaign of 1888" and a brochure, "In Honor of the Triumph of Our Arms...." (1986.0405).
- Ann M. Cooney: miniature crocheted table setting made in 1895 by Elizabeth Millon and a wooden display stand (1985.0774).
- Cooper LaserSonics, Inc. (through Harold L. Brinkman): 10 Dentsply/Cavitron ultrasonic, endodontic, and dental prophylaxis units with 2 boxes of "P" and "TFI" inserts (1985.0213).
- Cooper Wiss Industries (through J. W. Allen III and Thomas Harrington): 5 sock racks and a scissor screwdriver manufactured by WS YOHE, Dayton, Ohio (1985.0778).
- Connecticut Health Care Associates, District 1199 (through Mary G. Millar): 2 sheets of letterhead and 2 buttons for the Connecticut Health Care Associates (1986.0356).
- Dorothy Mann Cordry in memory of Donald Cordry: 69 stage sets, pieces, and mechanics, 5 puppets, and a program all used for the puppet play The Three Wishes; and 2 puppets and a backdrop from the puppet play The Dolley Sisters; all pieces and puppets made and used by Donald Cordry in the 1930s (1982.0238).
- Ray Costa: cacheted cover commemorating the launching of the USS <u>Drum</u> on May 23, 1970 (1984.0513).
- Hubert L. Costigan: movie poster for Little Miss Marker, 1933 (1985.0541).
- Richard J. Coulter: 5 painted iron shooting gallery targets (1985.0812).
- Harold Courlander: 2 oil paintings by David Courlander titled <u>Grandma's Happy</u>
 <u>Birthday and Unfurl That Flag</u> (1983.0696); watercolor painting titled
 Posse in Search of Billy the Kid by David Courlander (1984.0548).
- Josephine H. Cox: porcelain tea bowl and saucer decorated in the Japanese style, made by the Worcester Porcelain Company in England, ca. 1765 (1985.0437).
- Gail T. Crawford and Samuel A. Crawford in memory of Raymond William Crawford: gold cane handle with etched writing, "Alexander Crawford From his friend Andrew Jackson" and a gallery ticket to the U.S. Senate impeachment of President Andrew Johnson dated April 8, 1868 (1985.0853).

- George Creegan: sheet music for the naval march "Yankee Tars" composed by John Boulton and published by Belwin, Inc. of New York in 1919 (1984.0506).
- Government of Cuba, Minister of Communications, Philatelic Services: 18 mint stamps, souvenir sheets, and first day covers of Cuba (1983.0211); 24 mint stamps, 4 first day covers, and a souvenir sheet of Cuba (1983.0490); 13 first day covers and 12 mint stamps of Cuba (1984.0117).
- Mike Curb: NASCAR "Grand National" Pontiac racing car "Number 43" driven by Richard Petty when he won the "Firecracker 400" on July 4, 1984, his 200th career win (1985.0009).
- Estate of Howard Field Curry (through Ruth Curry): 4 light bulbs and a packaged set of 2 light bulbs (1984.0314).
- Kenneth A. Cutshaw: T-shirt, "Send A Bulldog To The U.S. Senate VICTOR ASHE U.S. SENATE" and a campaign button, "VISTOR ASHE U.S. SENATE" (1986.0473).
- Government of Cyprus, General Post Office, Philatelic Service: 21 specimen stamps of Cyprus (1983.0525).
- Government of the Republic of Cyprus, Ministry of Communications and Works,
 Department of Postal Services: 14 specimen stamps of Cyprus (1984.0628);
 15 mint specimen stamps of Cyprus (1985.0355); (through K. G. Spatharis):
 5 specimen stamps of Cyprus (1984.0225); (through Andreas Stamataris): 10
 specimen stamps of Cyprus (1985.0698).
- George W. Daly: Raytheon CK722 transistor (1984.0352); solid state 2N626 transistor (1984.0588).
- Ailsie H. Danforth in memory of Fredrick C. Danforth: steamboat captain's uniform owned and worn by John Stuart Hacker, captain of the <u>Cary Bird</u>, ca. 1925 (1985.0085).
- Daughters of the American Revolution, Prudence Alexandria Chapter (through Mrs. Willie A. Adcock and Mrs. Robert B. Van Buren): framed, hand illustrated poem by Grace Coolidge titled "The Quest" (1986.0023).
- Stuart C. Davidson: man's 3-piece suit of gray herringbone tweed wool with silk lining, worn in 1948 (1985.0666).
- Mrs. Gwyn Davis: oil painting by Mrs. Davis titled Wanette, Oklahoma, before Statehood in 1906 (1983.0695).
- Katherine P. Davis: white linen damask tablecloth with interwoven inscriptions relating to the Chicago World's Fair of 1892 (1986.0038).
- D C Comics Inc. (through Charlie McDade): 5 reproduction cover illustrations for Wonder Woman comic books (1982.0152).
- Frank Dean: 3 ropes, 3 whips, 2 rodeo costumes, and a saddle used by rodeo trick riders Frank and Bernice Dean (1984.0088).
- J. A. del Regato, M.D.: localizer and a set of 10 vaginal specula, all used in cancer treatment (1984.0702).
- Delta Council (through B. F. Smith): 100 open cotton bolls and a bale of cotton (1977.0200).
- Democratic Media Center (through John Franzen): 6 videotape cassettes of television advertisements run during the 1984 election year for the Democratic Party (1985.0523).
- Democratic National Committee (through Joan K. Vaught): 4 convention badges from 1976, 1980, and 1984 and 2 phonograph records by Carly Simon and Friends for the 1984 Democratic National Convention (1984.1105).
- Government of Denmark, Ministry of Public Works, General Directorate of Posts and Telegraphs: 60 mint stamps and 5 souvenir sheets of Denmark and the Faroe Islands (1984.0164); (through Lis Birkedal): 60 mint stamps of Denmark and the Faroe Islands (1983.0444); 140 mint stamps of Denmark and the Faroe Islands (1983.0491); 145 mint stamps of Denmark and the Faroe Islands (1984.0900); 101 mint stamps of Denmark and the Faroe Islands

- (1985.0333).
- Richard J. DePrez: stylus-operated calculator with instruction leaflet, made by The Calculator Corporation of Grand Rapids, Michigan, ca. 1915 (1986.0542).
- H. Martin Deranian, D.D.S.: 25 sets of dental tools and glass slides (1984.1135); 9 assorted wooden-handled vulcanite trimming instruments, 1890-1920; 5 hand-operated dental drills, ca. 1870; 2 S. S. White hand instruments, ca. 1868; 2 screw portes, ca. 1920; a German amalgamator, ca. 1920; 5-tier rotating burr holder made by Codman & Shurtleff, ca. 1900; a mechanical tooth forceps, ca. 1895; and a set of 4 ivory teething aids for children, ca. 1840 (1985.0964).
- Prof. Gerhard Derge: miner's dial made by James Reed of Pittsburgh, ca. 1850; surveyor's chain, arrows, and talley; Jacob staff; leveling rod; and a tripod (1985.0798).
- Gordon T. Diachenko: pair of sherry goblets with cut floral band and faceted knob, 1940s, and a pair of sherbet/champagne goblets cut in the "Majestic" pattern with a six-paneled stem, ca. 1983, all made by the Seneca Glass Company of Wheeling, West Virginia (1985.0084).
- Norman Diamond: Johnson Type D manual farebox, ca. 1925 (1985.0039).
- Raul Diaz: phonorecord and poster of "Pachuco Boogie" by Mr. Diaz (1985.0878). Eleanor Dickinson: 27 religious revival artifacts (1980.0463).
- Margaret Hamilton Dickson, B. Mynette Harding, Patricia Hamilton Mitcham, and Mrs. Elizabeth Hamilton Osborne: pink moire silk taffeta evening gown embroidered in a floral motif with glass beads and appliques, white fur cape fringed with two rows of ermine tails, pink silk parasol, and an ostrich feather headdress and fan, all worn and used by Mary Lowe Frost Hamilton in Washington, D.C., 1885-93 (1986.0186).
- Sidney Dickstein: 2 tennis rackets and a can of tennis balls, a pair of skis and poles, and a bowling ball and case (1985.0062).
- Laurence G. Dishman: Sol 20 microcomputer, Shugart disk drive, Admiral monitor, Texas Instruments printer, and a set of 26 disks (1986.0634).
- Robert Disraeli: black and white silver gelatin print, "The Tintype Photographer," by Mr. Disraeli, 1929 (1985.0615).
- Duilio Donati, M.D.: bronze medal of Ricardo Muti made by Giannantonio Bucci on the occasion of Muti's appointment as principal guest conductor of the Philadelphia Orchestra, 1977 (1985.0324).
- Matthias B. Donelan, M.D.: residential hydraulic elevator with oak-paneled car and 22 pieces of operating equipment, ca. 1902 (1985.0125).
- Sister Mary Jean Dorcy, O.P.: scissor-cut silhouette in frame of "Madonna of the Franciscans" by Sister Dorcy, 1949 (1984.0509).
- Gladys C. Dougherty: woman's wedding ring in box, 1890-1910; woman's wedding ring, 1935; and 3 pairs of woman's gloves, 1930-70 (1983.0732); 2 brooches and a necklace, 1950-59 (1984.0363); glass candlestick and a Japanese ceramic vase, both 20th century (1985.0627); 3 machine-knitted rayon handkerchiefs, ca. 1943 (1986.0039).
- Dow-Corning Corporation (through Scott J. Seeburger): silastic finger joint prosthesis and a prosthetic splint sample ring (1984.0622).
- Herbert and Naomi Drapkin: 5 pewter printing plates used to print music (1984.1040).
- Robert L. Drapkin, M.D.: 7 albumen photographs by Collard of St. Louis Bridge across the Seine in Paris, France, ca. 1863 (1985.0791).
- Mark Dreyfuss: pair of reading glasses, 1975 (1985.0538).
- Rod B. Dyke: philatelic cover damaged during the DeAutremont brothers' robbery of the Ashland and Gerber Train 13 at Siskiyou, Oregon on October 11,

- 1923 (1985.0344).
- General Ira C. Eaker, USAF Retired: tropical field jacket with 3 sets of insignia, worn by General Eaker during WW II (1986.0225).
- City of East Providence, Rhode Island, Department of Fire (through Ernest E. Currier and Earl P. Sandquist): 2 paper take-up reels, 2 register units, 2 rectifier panels, a protector panel, and a repeater unit (1978.2211).
- Celia Eckhardt: first published issue of feminist newspaper Hurricane Alice, Spring 1983 (1985.0172).
- The Edison Institute, Henry Ford Museum & Greenfield Village (through Robert E. Springer): automatic cut-off mill type steam engine made by C. H. Brown & Company of Fitchburg, Massachusetts, 1881 (1985.0318).
- Duncan Lewis Edwards: 4-piece silver tea set with ivory trim, made by Nicholas J. Bogert of New York City, ca. 1830 (1985.0962).
- E G & G Reticon (through Gene P. Weckler): 11 self-scanned solid state image sensors (1984.0062).
- Katherine and Ted Egri: 21 mimeographed newspapers of the USS <u>Blue Ridge</u>, 1943-45, and 2 accounts of Japanese treatment of prisoners taken in the Philippine Islands during WW II (1984.0785).
- Central Bank of Egypt, Head Office, Note Issue Department (through M. Abou El Ela): 25-piastres bank note put into circulation on June 16, 1985 (1985.0682).
- Paul Ehorn and John K. Trumbo: ship's capstan manufactured by Coffin & Woodward (1985.0151).
- Cleave Burtis Eimers, Helen Elizabeth Frey, Karolyn R. Poynter, and Joan Anderson Shaw, the daughters of Helen Cleave Anderson Ward: 7 Motor Corps of America uniform items, a New York City Reserve Police badge, service medal, and a War Camp Community Service Certificate, all worn and earned by Helen Cleave Anderson during WW I (1984.0507).
- H. K. Eklund: entrenching shovel, .37 mm shell, artillery shell fragment, Austrian rifle bayonet and scabbard, and a German signal pistol (1981.0892); Austrian steel helmet from the WW I period (1982.0295).
- John Eldredge: 2 cast iron journal box lids used on the Central Pacific Railroad, 1865 and 1875 (1983.0787).
- Edwin Ellett Tile Company (through Edwin E. Ellett and Grace W. Febrey): 3 sets of ceramic floor tiling and 2 decorated ceramic bathroom tiles, all made in the U.S., 1939-41 (1985.0539).
- Robert S. Embrey: 8 U.S. first day of issue covers bearing streetcar commemorative stamps (1984.0191).
- Lt. Col. William K. Emerson: WW I period Man-In-Service lapel pin (1985.0077); 4 cloth disk insignia for overseas caps, 1930s (1985.0431).
- Evelyn Endlich in memory of Marie Stoll Endlich and Wilhelmina Dollinger Endlich: 2 pieced work quilts, 2 embroidered counterpanes, and a Bucilla Working Chart for embroidery (1985.0771); in memory of her family: 3 lidded beer steins, a set of 2 pie crust cutters, cabbage-cutting board, Tyrolean hat, "Rund-um" game, figurine of a child, certificate of baptism, certificate of citizenship, family photograph, and an ink and watercolor drawing of immigrants in steerage (1986.0428).
- Energy Sciences Corporation (through Eugene S. Erdahl): 2 Detonics semiautomatic pistols with carrying cases, 1978 and 1983 (1983.0737).
- Herman W. Engel: 2 pairs of seal skins for skiing, ca. 1925; 2 pairs of ladies' and men's ski boots, ca. 1930-1935; a pair of ladies' ice skates, ca. 1910; pair of plastic skate guards; and a knapsack, ca. 1925 (1985.0056).
- Mark R. Enger: woman's ermine coat, 1901 (1979.0388).

- Catherine C. Eppinger: 2 woman's dresses, 1880-98; 3 pairs of silk stockings; and a silk and ivory fan in its original box, 1900-09 (1985.0673).
- EPRAD Inc. (through Steven D. Kear): drive-in theatre speaker, ca. 1950 (1985.0088).
- Suzanne Liebers Erickson (through Ralph Erickson): 41 gold sovereigns and 41 U.S. coins and medals (1986.0445).
- E. Alden Eriksson: granite "sleeper" block from the roadbed of The Granite Railway of Quinon, Massachusetts, the first railroad in the U.S., 1826 (1984.0863).
- Luis Tomas Estrada: 2 posters of Uncle Sam with the message, "Uncle Sam Wants to Kick Ass!," made by Mr. Estrada during the Iranian hostage crisis of 1979-81 (1985.0339).
- D'Anne A. Evans: woman's brown hairpiece, 1960-69, and a boy's red La Coste shirt, 1974-80 (1984.1035).
- D. E. Evelyn: stereo card showing a postman in uniform by the Keystone View Company, ca. 1905 (1984.0529).
- Dr. Charles Fairbanks: 10 sherds of Yayal blue on white pottery and 10 sherds of Columbia plain pottery (1980.0862).
- Judith Dolan Falcon: Deed of Sale for an 8-year-old black male slave named Mortimer, sale made in Indiana in 1841 (1984.0949).
- Ruth Glover Fansler: woman's necklace and brooch, 1900-24 (1985.0619).
- Belmont Faries: Electronic Computer Originated First-Class Mail last day of operation cover dated September 3, 1985 (1985.0858).
- Government of the Faroe Islands, Postverk Foroya: 31 mint stamps and 3 first day covers of the Faroe Islands (1983.0399); 20 mint stamps, 2 first day covers, and a souvenir sheet of the Faroe Islands (1983.0637); 30 mint stamps and 2 first day covers of the Faroe Islands (1984.0446); 20 mint stamps and a first day cover of the Faroe Islands (1984.0626); 41 mint stamps and 3 first day covers of the Faroe Islands (1985.0113).
- Jeannine Lattin Farrell: Royal Standard #5 manual typewriter (1985.0953).
- Karen Faryniak: print of Independence Hall made for the Bicentennial (1985.0910).
- Federated Women in Timber (through E. J. Cutler and Billie Smith): 33 miscellaneous items including conference packets, bumper stickers, buttons, rubber stamps, T-shirts, pins, posters, and pencils, all relating to the Federated Women in Timber (1986.0423).
- Federation of Postal Police Officers (through Eugene Lewis): 2 stickers and a sheet of letterhead (1986.0328).
- The Honorable Geraldine O. Ferraro: 6 campaign buttons, 3 bumper stickers, a poster, tape, piece of sheet music, tie tack, strip of 5 stickers, cartoon, and a dress, all relating to Geraldine Ferraro's 1984 campaign for Vice President of the United States (1986.0540).
- Michael Ferrer: letter carrier's badge number 1504 (1986.0443).
- John T. Fesperman: phonorecord "Charles Fisk and the Baltimore Organ," a recital by Mr. Fesperman (1986.0475).
- Julia Fiechter: 10 pieces of maternity clothing worn by Mrs. Fiechter in 1931 (1985.0192).
- Portia M. Filbert: 6 silver U.S. award medals presented by the "Maryland Institute for the Promotion of the Mechanic Arts," last half of the 19th century (1986.0490).
- Detmar H. Finke: 24 pieces of Staunton Military Academy cadet uniforms and accessories worn by John Finke, 1970s (318932).
- Bernard S. Finn: baggage check from the Baltimore and Ohio Railroad (1984.0115); 32 phonorecords (1986.0028); mastitis test kit made by the

- Rex Corporation, ca. 1945, used to detect infection in a cow's udder (1986.0546).
- Jane A. Finn: pair of woman's rhinestone-covered shoe heels, 1925-35 (1984.0894).
- The First Canadian Bank, Bank of Montreal (through Freeman Clowery): 7 sheets of 4 proof notes each of the Bank of Montreal, 6 sheets are dated January 2, 1904 and one sheet is dated January 2, 1895 (1985.0519).
- Roger Fischer: 889 campaign and issue buttons and an embroidered applique "Pro-Life Rose" (1985.0693).
- Fisher Pen Co. of Nevada (through Paul C. Fisher): ballpoint "Space" pen by Fisher (1985.0959).
- Kevin Fitzgerald: Carterfone, electro-acoustic converter (1984.0877).
- Frank L. Flay: 2 shoulder knots for a First Lieutenant of the U.S. Army Infantry's 22nd Regiment, late 19th century (1981.0439).
- John H. and Virginia J. Flesher: letter with envelope to the Republican Women's Club of St. Louis, Missouri from Grace Coolidge, November 13, 1926 (1986.0314).
- Frances W. Fletcher: leather softball autographed by Lefty Grove, Ted Williams, and other members of the Boston Red Sox baseball team, 1940-41 (1985.0807).
- Flexitron Industries Inc. (through John H. Beier): gift box of 33 *Clippos, office box of 50 *Clip-Its, and a blister pack of 10 *Clip-Its" (1985.0934).
- Florida Department of Transportation (through Thomas E. Drawdy): Florida U.S. 17 route marker, 1925-35 (1985.0480).
- Charles F. Flynn: Stratopen "Birome" ballpoint pen (1986.0303).
- Byron Jeffrey Fogel: 321 paper placemats from food establishments (1981.0981).
- Ursula N. Forbes: 2 proportional dividers, 2 planimeters, a limb protracter, parallel rule, station pointer, set of drawing instruments with instruction pamphlet, and an air brush with pin (1986.0316).
- Martha P. Forrest: 22 pieces of clothing from the early 20th century, a Wilson College medal, ca. 1904, and Dr. David P. Trout's dental medical bag (1983.0049).
- A. T. Forrester: 5 photoelectric mixing tubes and a microwave coupling device (1983.0839).
- Fletcher W. Forsyth: 8 medals and ribbons, 4 pieces of insignia and a box, 2 rosettes, chapeau and box, and a brass stamp, all used by Rear Admiral James McQueen Forsyth during his naval career, late 19th to early 20th century (1985.0300).
- Jacqueline Loewe Fowler: 37 pieces of clothing and accessories of the 18th, 19th, and 20th centuries (1982.0124).
- William Fowler: cast iron journal box lid used on the Central Pacific Railroad, dated 1875 (1983.0789).
- Marion I. Francis: man's gold souvenir ring from the Centennial Exposition of 1876 held in Philadelphia, Pennsylvania (1985.0090).
- Noralee Frankel: purple, white, and yellow banner worded "Women Historians' Comm. of the OAH" (1984.0861).
- Norman Frantzman in memory of Max William Frantzman: Rolls razor in original box, 1920-50; a Ronson razor with blades and original box, 1930-50; and a Gem razor with blades, instructions, and original box, 1950-65 (1983.0282).
- Linda Joynes Frey and Sewell L. Frey: framed bed springs made by the Simmons Company in the 1930s (1986.0481).
- Robert Friedel: musical Christmas card (1984.0041); "Radioear, Eighty Three"

- hearing aid (1984.0616).
- Leonard T. Friscia: U.S. Army Quartermaster handcart, ca. 1937 (1985.0267).
- Frontlash (through Joel Klaverkamp and Jessica Smith): 3 posters and a set of documents encouraging people to register and vote, 1982-84 (1985.0174).
- Robert J. Frost, M.D.: monocular microscope with accessories made by the MacIntosh Battery and Optical Company, patented March 13, 1882 (1984.1074).
- Stephen M. Fry: laser tube (1985.0269).
- Linda A. Frye: banner, "The World Is My Country/ All Men Are My Brothers/To Do Good Is My Religion," from the August 4, 1985 "The Ribbon" peace rally in Washington, D.C. (1986.0048).
- Estate of Jessie P. Fugett (through Martha F. Wiglesworth): Marseilles quilted counterpane with representation of the U.S. seal, early 19th century (1986.0286).
- G&A Communications (through Franklin Greer): 2 videotape cassettes,

 "Challenge, History, History-30, and Moving Forward" and "Together," and
 a press kit, "Together For Fifty Years," all in honor of the United Auto
 Workers' 50th Anniversary (1986.0112).
- Regina Gabler, M.D.: woman's gym suit, 1927-28 (1984.0825).
- Steven Galen: 18 pieces of children's clothing worn by Andrew and Gillian Galen, 1979-84 (1985.0177).
- B. Jack Gallaher: 2-brick adobe mold made in Socorro, New Mexico for Mr. Gallaher's house construction, ca. 1970 (1981.0807).
- Game Plan, Inc. (through Wendall McAdams): Sharpshooter II pinball machine (1984.0887).
- David L. Ganz: James A. Bolen gold medal with portrait of Thomas Jefferson (1985.0019); gold medal portraying Andrew Jackson (1986.0034).
- Helen W. Stothoff Garden: gold pin and organdy hat awarded to Mrs. Garden on her graduation from the nursing school of Passaic General Hospital in Passaic, New Jersey, 1934 (1984.1073).
- Gardena Valley Democratic Club (through Harmon Belcher and Rosalie A. Preston): 4 *Californians for Mondale & Ferraro* buttons (1984.1022).
- Carl Gatter: 5 fabric labels used for imported Japanese silk, ca. 1930, and an invoice form printed for W. A. Forsyth of Philadelphia, Pennsylvania (1984.1060).
- Joseph L. Gattuso: album of photographs taken by Mr. Gattuso while traveling in his 1974 Ford Pinto automobile (1985.0479).
- Dr. Istvan Gedai: 2 Hungarian 5-forint coins, 1946 and 1947 (1985.0608).
- General Electric Company (through Dr. P. von Herrmann): set of pyrolytic graphite horseshoe-type incandescent lamp filaments, ca. 1915 (1984.0356).
- Joseph Genovese: master clock made by International Recording Company, ca. 1915, and the back of a slave dial (1984.0807).
- Georgetown University Medical Center, Division of Plastic and Reconstructive Surgery (through Sharon Romm): box of 10-1 surgical sutures of black monofilament nylon used in microsurgery (1986.0414).
- Georgetown University Medical Center, National Biomedical Research Foundation (through George Houston and Matthew F. McNulty): automated, computerized transverse axial scanner for whole body tomography invented by Dr. Robert S. Ledley and put into clinical operation in 1973 (1984.0680).
- State of Georgia, Department of Transportation, Operations Division (through Archie C. Burnham, Jr.): Georgia U.S. 1 route marker sign, 1950s (1964.0938).
- Sylvia M. and William Gersch: polychrome painted black basalt ceramic potpourri vase marked "Wedgwood," ca. 1830 (1985.0064).

- Nancy Gewirz: 2 woman's dresses designed by Mary McFadden, a woman's jacket designed by Valentine, woman's skirt and trousers designed by Yves St. Laurent, and a pair of woman's shoes designed by Maud Frizon, 1976-84 (1986.0429).
- Henry Gichner in honor of the family of Fred S. Gichner: strong box, key and warded lock housing, padlock, keyhole escutcheon with key, and a large lock with 3 bolts (1982.0021).
- Gilbarco, Inc. (through Janet P. Hancock): 2 gasoline pumps, a Gilbarco Trimline Mechanical Dispenser, and a Gilbarco Highline III Electronic Dispenser (1982.0139).
- Cory Gillilland: 500-peso Argentina currency; 5-mark German currency, 1978; U.S. medal commemorating the American Medallic Sculpture Association Exhibition in 1983; and a United Nations medal commemorating World Food Day in 1984 (1985.0706); bronze medal struck to commemorate the 20th Congress of F.I.D.E.M. at Stockhlom, 1985 (1985.0779); 3-part bronze medal commemorating "L. M. Ericsson 1876-1976" by Kauko Raesaenen of Finland, 1975 (1985.0895).
- Brenda J. Gilmore: 2 bottles of sun screen lotion, tube of lip balm, frisbee, T-shirt, wristband, key chain, and a canvas bag all used by Ms. Gilmore while she participated in the 1984 U.S. Wheelchair Tennis Championship (1984.1013).
- Glass, Pottery, Plastic & Allied Workers International Union (through Harry L. Moore): union charter, patch, coaster, badge, lapel pin, and a button relating to the Glass Bottle Blowers Association and a patch, badge, lapel pin, and a button relating to the Glass, Pottery, Plastic & Allied Workers International Union (1986.0260).
- Jeanette G. Glassberg: letter dated June 6, 1831 concerning a U.S. Naval Academy appointment for a grand-nephew of John Paul Jones and a letter with envelope from the Secretary of the Association of the Oldest Inhabitants of the District of Columbia dated November 15, 1914 (1985.0416).
- Mrs. Marjorie J. Glassco: Corona standard portable typewriter with case (1986.0082).
- Daniel L. and Merel P. Glaubinger: 2 wooden bunk beds used on a liberty ship during WW II (1985.0304).
- Elmer E. Goetsch: 1/4-ton jeep truck manufactured by Willy's in 1943 (1981.0915).
- Evangeline Goff: Fox portable No. 1 typewriter (1985.0653).
- John C. Goff: M-4 artillery sight for a mortar (1986.0221).
- Morris Goldsmith: "H H H" commemorative goblet made by the Seneca Glass Company of Wheeling, West Virginia in 1972 and a group of documents about the goblet (1985.0250).
- John M. Goodsell: Civil War folding camp chair given to George Goodsell by General U. S. Grant (1985.0713).
- Robert Gordan: 9 glass slides and a box of Peerless Typewriter paper slides (1984.0459).
- Joyce Sehrt Gordon: International Harvester banner (1986.0085).
- John T. Gould: rubber stamping device to mark facing slips used by Franklin F. Gould, Railway Mail Service postal clerk, on his last run before retirement on October 26, 1940 (1985.0349).
- Lorna Gould: ceramic plate hand-decorated by Ms. Gould with flowers, leaves, and birds, ca. 1952 (1984.0724).
- Grag Chandler Gove: burner stove from a Trav-L-Coach trailer, ca. 1934 (1984.0300).

- G. M. O. Gracida: polo mallet autographed by Mr. Gracida (1984.0524).
- Raymond E. Graglia: Mickey Mouse back scratcher (1985.0275).
- Helen Mattson Graham and H. Frazyer Mattson: bed cover of English copperplate printed cotton in "Children's Games" design, early 19th century (1985.0645).
- Graphic Communications International Union (through Walter Lypka): 26 miscellaneous items relating to the Graphic Communications International Union including hats, brochures, buttons, decals, patches, plastic bags, a pen, pin, bumper sticker, coaster, and stationery (1986.0232).
- Estate of Helen C. Gray (through William C. Gray): set of Gray & Davis headlamps for a Winton automobile (1981.0959).
- Juanita Gray: badge/ribbon and a Stetson cowgirl hat, both from the International Trick and Fancy Ropers Association Convention, 1983 (1984.0811).
- Mary Eloise Green: flour bin with sifter and a wire rack used in a wash boiler for home canning (1984.0958).
- Ralph Greenhill: 4-page flyer titled "Gifford Injector for Feeding Boiler," dated 1874 (1986.0585).
- Greenland Thompson Pottery: 3 molds, 2 leather templates, wooden lid, ball of clay, and a rectangular chamois (1982.0532).
- Steven Gremminger: electric counter-top dishwasher made by the General Electric Company, ca. 1940 (1986.0484).
- David A. Grier: 2 French WW I posters (1986.0381).
- Alice McGrain Griffith and Preston McGrain: 2-piece ball gown worn by Matilda McGrain Gresham, 1893-96 (1985.0474).
- David Grossman: reproduction opaque-white glass creamer in the "Panelled Grape" pattern, 3-part mold in "Panelled Grape" pattern for a creamer, a glassmaker's paddle, tongs, and a tube, all used or made by the Westmoreland Glass company of Grapeville, Pennsylvania in the 20th century (1985.0008).
- William C. Grove on behalf of the Charles William Grove Family: Jacobsen rotary mower, 1935-40 (1983.0322).
- Dr. Wladyslaw Grzedzielski: 5 Polish harvest staffs (1978.0644).
- GTE Laboratories Incorporated (through B. H. Burdine and R. J. Grippo): optical repeater, section of a fiber optic cable, amplifier, terminal light source, light emitting diode, photodiode detector, and a "V" block (1982.0529).
- Frank A. Gunther: Zenith FM receiver (1983.0283).
- Ron Guth: Vermont copper cent dated 1786 (1986.0529).
- Hach Company, Agricultural Division (through Scott V. Brayton): soil analysis portable laboratory (1985.0330).
- Mrs. Albert Haertlein: 3 folding squares and 3 sectors (1985.0580).
- Julie Link Haifley: 3 woman's dresses, a 2-piece suit, pantsuit, and a coat, all worn by Mrs. Haifley, 1967-72 (1985.0511).
- Doris Williams Hailey: 2 U.S. Post Office Department travel passes issued to postal inspector Joseph L. Bristow in 1898 and 1901, and a complimentary pass issued to Mr. Bristow by the St. Louis and San Francisco Railroad Co. in 1899 (1984.0192); funeral service invitation for Postmaster General Henry Clay Payne in mourning envelope, October 7, 1904, an engraved dinner invitation from Postmaster General and Mrs. Gray, and a complimentary railway pass on the Monte Ne Railway issued to the 4th Assistant Postmaster General Joseph L. Bristow, 1902 (1984.0619).
- James A. E. Halkett, M.D. and Adam Wesolow, M.D. (Sigmund Adam Wesolowski): 60-piece mechanical heart pump developed by Dr. Halkett and Dr. Wesolow

(1985.0101).

- Joseph A. Haller: board game, "Mystifying Oracle, the Original Ouija" with planchette, designed and copyrighted by William Fuld of Baltimore, Maryland in 1938 (1986.0541).
- Ives Dulles Hannay: fragment of blue and black patterned silk used as a quilt lining, 19th century (1985.0030).
- F. C. Harding: Uher 4000-L tape recorder (1985.0891).
- James D. Hardy, M.D. and Louise S. Hardy: plastic encased human lung and the heart of a chimpanzee, both the first such organs to be transplanted into a human being, 1960s (1983.0657).
- Harlem Globetrotters Inc. (through R. H. Palmer): 9 cartoons and drawings, 5 posters, 4 pieces of uniform and warm-up clothing, a pennant, and a record with the song "Sweet Georgia Brown" (1983.0782).
- Robert A. Harmon: portable pneumatic drill patented by Henry J. Kimman and an electric hand drill built by the Chicago Pneumatic Tool Company, ca. 1920 (1986.0124).
- P. W. A. Harradine: 5 philatelic covers from the U.S. occupied Philippines censored in 1919 with markings 1802, 1812, and 1814 (1985.0545).
- Irma Harrison: 11 U.S. first day covers, programs, and postage stamps of the Republic of China (1984.0158).
- Betty J. Harvey in memory of Mrs. Mabel Todd: woman's 2-piece silk ball gown, ca. 1876, and a hat, shawl, and fan worn with the dress, late 19th century (1984.1078).
- Elsie C. Harwood: 5 playbills including <u>Richard III</u> with John Wilkes Booth, <u>Lucretia Borgia</u>, <u>Po-Ca-Hon-Tas</u>, <u>Richelieu</u>, and a "'Grand Concert' in Turner's Hall," one featuring J. L. Graves, grandfather of Elsie C. Harwood (1984.0983).
- Max L. Haube: album of 101 photographs, negatives, and a postcard of salmon fishing and canning operations in Petersburg, Alaska (1985.0141).
- Mrs. Emilie J. Haugh: 37-star U.S. national flag with stars formed by clamp-dying, made by the U.S. Bunting Co. of Lowell, Massachusetts, 1870s (1985.0493).
- Maud Callaway Hays in memory of Major Ted C. Hays: 47 pressed glass objects in the "Liberty Bell" pattern made by Gillinder & Sons of Philadelphia, Pennsylvania for the U.S. Centennial of 1876 (1985.0371).
- Margaret Healey Hearn: porcelain plate decorated with "Healey Gold" by china painters Mary and Emily Healey (1985.0692).
- Meryem S. and Raymond J. Hebert: 791 Indian numismatic specimens including coins, badges, medals, tokens, weights, and financial documents (1984.0849); 110 U.S. financial documents (1985.0936); 89 U.S. and foreign devotional medals (1986.0086); 20 Bhutanese, Nepalese, Tibetan, and Chinese coins and currency and 2 cowrie shells (1986.0087).
- Raymond J. Hebert: group of 13 Abrus Prectorius seeds used as weight standards for currency (1985.0366).
- Lawrence C. Heim: 14 U.S. Air Force uniforms (307614).
- William F. Helfand: 4 patent medicines including Grove's Chill tonic,
 Peterson's ointment, a physician's sample of Iodex, and a professional
 packet of medicine dressing and 2 trade tokens including a 1963 U.S.
 penny in aluminum frame from Ray's Central Drug of Seminole, Oklahoma,
 and a *10 cents in drinks* token from Canton Drug of Canton, Oklahoma
 (1985.0464).
- Edward L. Heller: 3 slide rules (1984.1068); concise CTSC-552 slide rule and

- Atomic Energy Commission calculating rule, both in cases (1985.0636); Controller circular slide rule in case (1985.0788); gasoline 1-burner cooking stove, 1942, and an Eisenhower-style field jacket (1986.0099).
- Laura S. Hemenway: handwoven coverlet made in 3 sections, 19th century (1986.0289).
- Esther S. and James C. Henderson: 8-column carriage comptometer, ca. 1904 (1982.0234).
- Mrs. Nellie G. Hendrickson: TV cabinet for a 1948 RCA Model 630TS, and a mineral oil magnifier lens for a small screen television set (1983.0307).
- Leigh E. Herman: surveyor's transit and case made by William J. Young & Sons of Philadelphia and a surveyor's chain made by Keuffel & Esser Co. of New York (1985.0800).
- John Herron: pair of short chaps (1979.0252).
- Hershey Foods Corporation (through Donald J. Struke): 4 dummy 1-ounce Hersey's Tropical Chocolate Bars, 2 U.S. Army type D ration bars, and a dummy 48-ounce box of type D ration cakes dated January 1942 (1977.0865).
- Marvin Heuer, M.D.: 3 shopping bags made of paper and twine, all examples of bags invented and patented by Walter H. Deubener in the 1920s (1986.0030).
- Mary Darling Hewes: campaign lantern, "Lincoln and Johnson," 1864 (1986.0066).
- Major William C. Hickson, USAF (Ret.): 30-star U.S. national flag, July 4, 1848 to July 3, 1851 (1985.0575).
- Martha D. and T. Jeff Hill: 2 mailhawks developed by Mr. Hill to extend the reach of rural mail carriers (1985.0348).
- Norma J. Hirsh, M.D.: air lock unit developed by Dr. Allan Bloxsom to resuscitate newborn infants, 1952 (1984.1072).
- Dan and Nita Hobaugh: 2 vibroplex telegraph keys (1985.0885).
- Dr. U. Hochuli: 15 laser discharge tubes made of various metals and alloys (1985.0278).
- Kenneth F. Hodges: electric waffle iron made by Westinghouse Electric and Manufacturing Company of Mansfield, Ohio, 1939-40 (1985.0835).
- Steven E. and Susan S. Hodges: 49 foreign bank notes (1986.0353).
- Barry D. Hoffman: Massachusetts Militia officer's uniform coat and a silver epaulette from the War of 1812 (1984.0592).
- Dustin Hoffman: 9-piece costume worn by Dustin Hoffman in lead role in the movie Tootsie (1984.0549).
- Ensign Kristine Holderied: 4-piece full dress uniform of a U.S. Naval Academy Midshipman worn by Ensign Holderied, the top ranking graduate of the Class of 1984 (1984.0784).
- Nannie T. and Virginia Hollerith in memory of Herman Hollerith: 3 medals and a diploma awarded to Herman Hollerith for his electric tabulating system, ca. 1890 (1985.0200).
- Chap. Anthony W. Hollis: 19-piece Protestant chaplain's combat altar and Communion kit issued in 1967 (1986,0439).
- Stu Holzman: Johnson Type J fare box, ca. 1935 (1984.0353); Type K fare box (1984.0744); 4 bus company hat badges, 2 change carriers, service pins on a bar, name pin, and a ticket punch (1985.0080).
- Estate of Dorothy Nye Holway (through Ellen N. Holway): book, <u>Dinsmore's</u>
 American Railroad & Steam Navigation Guide (1984.0161).
- Theodore C. Hooker: German Luger pistol with accessories (1984.0947). Florence Vincent Hopka: timer for washing machine, patented in the 1920s
- Jane Horrocks: Girl Scout sash with 9 badges and 3 pins attached and 3 separate badges (1986.0019).

(1984.0095).

Theodora C. Hoskinson: child's toothbrush made of silver, glass, and natural

- bristle by "Towle Mfg. Co., Newburyport, MA," 1948 (1985.0727).
- Edwin A. Hough: Japanese officer's full-dress uniform including coat, trousers, and cap, 2 Japanese officer's dress shoulder knots, a sword knot, silver colored metal insignia box, and a wooden talisman (318009).
- Howe Press, Perkins School for the Blind (through Harry J. Friedman): children's book written in braille titled Little Bunny Follows His Nose (1984.0792).
- Juanita I. Howell: set of matching man's and woman's rodeo outfits, 2 cowboy hats, 2 trophies, corduroy culottes, leather jacket, saddle blanket, and horse blinkers used by Chet and Juanita Howell on the professional rodeo circuit, 1930s-40s (1985.0890).
- Howmedica, Inc. (through D. Fitzgerald): Flatt finger joint internal prosthesis (1984.0667).
- Dr. William D. Hoyt: oil painting, View of Cornish, New Hampshire by Ellen Axon Wilson, 1913 (1986.0511).
- David R. Hudgel, Jr.: "Pennsylvania Turnpike" automobile license tag, ca. 1950 (1983.0506); replica of a map showing the area covered by the San Francisco Post Office as revised in 1961 (1984.0830).
- A. A. Huebner: Parcel Post scale made by the Triner Scales and Manufacturing Co., Chicago, Illinois, ca. 1932; 3-wheeled city collection cart with leather bag, 1965-70; and a canvas collection bag (1985.0354).
- Ellen Roney Hughes: 2 pairs of girl's field hockey shoes and a pair of boy's soccer shoes (1986.0017).
- Paul R. Humphrey: Capehart phonograph record changer which automatically turns over a record and plays the flip side, 1940s (1984.0162).
- Joan and Richard Dale Humphrey: set of 85 date nails for use by the Kansas City Southern Railroad to determine the service life of cross ties, 1900-83 (1983.0788).
- John E. Hurt: hunting knife with sheath, ca. 1850 (1983.0148).
- Noyes Huston: tintype with image of the locomotive and tender H. A. Henry and a half-plate ambrotype with image of locomotive and tender, both encased (1984.0072).
- James S. Hutchins: 9 mounted albumen photographs of saddles and a leather album containing 22 tintypes of saddles, 1870s (1985.0228).
- Philip L. B. Inglehart: silver polo trophy for the "Sparrowhawk Championship," September 1926 and a polo jersey, 1930s (1984.0804).
- University of Illinois at Urbana-Champaign, College of Applied Life Studies,
 Department of Physical Education (through Prof. Rollin G. Wright): 19
 devices used to take measurements before and after exercise and 2 groups
 of records from sports medicine experiments (1984.0561).
- Industrial Union Department AFL-CIO (through Elmer Chatak): badge, "AMERICAN FEDERATION OF LABOR CONGRESS OF INDUSTRIAL ORGANIZATIONS," sheet of stationery, and a union label, all relating to the Industrial Union Department, AFL-CIO (1986.0334).
- Mrs. Paul T. Insley, Sr.: Lincoln campaign pin, 1864 (1986.0010).
- International Alliance of Theatrical Stage Employees and Moving Picture
 Machine Operators of the United States and Canada (through Barbara W.
 Robinson): registered union label, sheet of stationery, patch, sheet of 3
 labels, and a booklet, all relating to the I.A.T.S.E. and a plaque for
 the I.A.T.S.E. & M.P.M.O. (1986.0341).
- International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers (through C. W. Jones): 2 decals, 2 badges, a patch, and a lapel pin, all relating to the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers and a

- first day cover marked "Organized Labor Proud and Free" (1986.0237).
- International Brotherhood of Electrical Workers (through Jack F. Moore and Charles H. Pillard): lapel pin, "IBEW;" decal, "Union Made;" and a button, "I.B.E.W." (1986.0235).
- International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America (through Weldon L. Mathis and Jackie Presser): convention badge, label, and a sheet of stationery, all relating to the International Brotherhood of Teamsters, Chaffeurs, Warehousemen and Helpers of America (1986.0348).
- International Chemical Workers Union (through Frank D. Martino): 3 buttons, a sheet of letterhead, leaflet, and a pamphlet, all from the International Chemical Workers Union (1986.0294).
- International Ladies' Garment Workers' Union (through Jay Mazur): 2 sheets of stationery, a union label, patch, roll of union labels, lapel pin, and a button, all relating to the ILGWU (1986.0344).
- International Leather Goods Plastic and Novelty Workers' Union (through Randolfo Bobe): 2 buttons, 2 sheets of stationery, a badge and a label, all relating to the International Leather Goods Plastic and Novelty Workers' Union (1986.0347).
- International Longshoremen's Association, Local No. 24 (through LeRoy Bruner and R. M. Trapp): lapel pin and a sheet of stationery for the International Longshoremen's Association, Local No. 24 (1986.0264).
- International Plate Printers, Die Stampers and Engravers Union of North America (through James Louis Kopernick): 3 certificates used for transfers, memberships, and credentials; 2 seals; a membership card; and a sheet of letterhead, all used by the International Plate Printers, Die Stampers and Engravers Union of America (1986.0295).
- International Union, United Plant Guard Workers of American (UPGWA) (through Francis E. Fitzpatrick): 2 UPGWA decals, patch, and a sheet of letterhead (1986.0329).
- International Union Allied Industrial Workers of America (through Dominick D'Ambrosio): 7 buttons, 2 bumper stickers, 2 stickers, and a sheet of stationery, all relating to the Allied Industrial Workers of America (1986.0360).
- International Union of Electronic, Electrical, Technical, Salaried and Machine
 Workers, AFL-CIO (through Jerry Borstel): 2 envelopes, 2 sheets of
 letterhead, a lapel pin, handout, and a news release, all relating to the
 International Union of Electronic, Electrical, Technical, Salaried and
 Machine Workers, AFL-CIO (1986.0296).
- International Union of Operating Engineers (through Francis Hanley): lapel pin, sticker, union label, and a sheet of stationery for the International Union of Operating Engineers (1986.0355).
- International Union of Police Associations (through Robert B. Kliesmet): lapel pin and a sheet of stationery for the International Union of Police Associations (1986.0335).
- Anahid Iskian: tan leather combination lock suitcase with a blue canvas cover, 1940-45 (1985.0058).
- Government of the State of Israel, Ministry of Communications, Philatelic Services: 8 first day covers and a mint stamp of Israel (1983.0518); 9 first day covers of Israel (1984.0334); 10 first day covers of Israel (1984.0671); 9 first day covers of Israel (1985.0234).

- Marion Israel: woman's gold bracelet, 1870-79 (1985.0661).
- Faith R. Jackson: miniature steamship model in a bottle (1985.0044).
- Jane B. Jackson in memory of C. Bremner H. Jackson: 4 German horsehair plumes for Cavalary helmets; a pair of white cotton stockings, 1820-60; and a butternut frock coat with Virginia state buttons, Civil War period (1983.0860).
- Virginia Jackson: Roll of Honor certificate and a Defense and Liberation medal and certificate, WW I; 4 medals from WW II; and a Recognition of Service from President Lyndon B. Johnson, all awarded to Virgil A. Jackson (1984.0918).
- George Jacobs: radio receiver powered by a thermoelectric kerosene lamp made for internal short wave programming in the U.S.S.R. (1984.0019).
- The Bank of Japan (through Katsuhiko Oura and Yoshiaki Toda): 6 Japanese yen notes (1984.1043); (through Katsuhiko Oura and Kazuhiko Sugimoto): 2 500-yen coins issued in commemoration of TSUKUBA EXPO '85 (1985.0322); (through Kazihuko Sugimoto and Kozo Tsukagoshi): 2 500-yen coins commemorating the centennial anniversary of the Cabinet system in Japan, 1985 (1986.0035).
- Clinton E. Jencks: 39 pieces of labor history memorabilia, 1878-1967 (1985.0678).
- James J. Jetzer and Roy Van Sluys: ship's capstan manufactured by Boston Machine Company (1985.0152).
- Jockey International (through William C. Herrmann): 2 pairs of woman's panties and a pair of man's shorts, 1985 (1985.0665).
- Mary Louise Johnesse (through Harry A. Calevas): 2 miner's candlesticks (1986.0320).
- W. Brooke Johns: 8 phonograph records with performances by Mr. Johns (1984.0133).
- Alma G. Johnson: nurses' aide uniform made from a sheet by Mrs. Johnson for her daughter during WW II (1984.0683).
- Huey D. Johnson in memory of Mrs. Joyce Johnson: 2 sets of salt and pepper shakers, a lidded syrup jug, sugar shaker, and a table lamp, all in "Maize" pattern art glass, 1889-1910 (1983.0367).
- Margot Johnson, Inc. (through Margot Johnson): invalid's chair (1985.0011).
- Evelyn A. Johnstone: violin made by Leopold Widhalm of Nurnberg, Germany, 1760-82 (1985.0794).
- The Jolson Centennial Committee (through Nathaniel P. Berman): 7 phonorecords and 4 pieces of sheet music, all by Al Jolson (1985.0256).
- Anthony L. Jones: 2 posters labeled "Vote Here" and "Another Vote For Reagan" (1985.0067).
- Candace M. Jones: 4 political leaflets (1985.0525).
- Thomas J. Jones: 11 tickets, 9 official programs, 2 tour books, 2 illustrated envelopes, a souvenir shield, stadium sculpture, post card, miniature shorts, ashtray, and a sheet of stationery, all from the Los Angeles Olympics, 1932 (1984.0449).
- Margaret Jongbloet in memory of Louis A. Jongbloet: 3 books of the history of ancient art, 1789, and a book about the City of Brussels, 1785, all bearing the bookplate of William Short and a book with a map of the City of Washington, 1793 (1985.0424).
- George E. Jordan: printed paper mache devil's head used in Mardi Gras parades in New Orleans, Louisiana, made by Joseph E. Barth III, ca. 1975 (1985.0560).
- Joyce A. Judd: copy of the "Ratified Treaty of Peace, Feb. 20, 1815" between Great Britain and the United States with an envelope (1986.0065).

- Evelyn K. Judge: taped interview with Elizabeth Chavis on February 25, 1983, concerning her son, Ben Chavis, and the "Wilmington 10" (1985.0204).
- Junior League of Northern Virginia (through Karen S. Spence): woman's nightgown, 1925-35 (1985.0840).
- Alvin Robert and Marjorie Sered Kantor: 10 documents, proclamations, and accounts concerned with the early establishment of the U.S. postal system dating from 1711 to 1799 (1984.1127); letter written by Joseph Warren to the Lieutenant Governor and Company of Rhode Island dated June 15, 1775 which bears the only known marking of the Constitutional Post (1985.0970).
- June C. Karamessines and Vera C. Parmiter: document from South Carolina dated 1710 and a Deed of Trust with ribbons and red wax seals dated June 15, 1812 (1978.0648).
- Yolande Romsey Kaswell: woman's gym shorts and a gym suit with bloomers (1984.0888).
- Lucille D. Kaufman: woman's robe designed by Emilio Pucci (1985.0920).
- John W. and Patricia A. Kaufmann: private carrier letter typewritten by Charles Thurber, inventor of the typewriter, to Lewis Thurber Lazell, Esqr. on July 31, 1844 (1984.0564).
- John L. Kay: 6 cacheted covers cancelled during the last run of Trains 3 and 4 of the New York and Washington Railway Post Office service on June 30, 1977 (1985.0345).
- Ben Kaye: phonorecord of "The Ballad of America" composed by Mr. Kaye (1985.0877).
- Eleanor L. and John S. Kebabian: hydraulic pump patent model designed by James B. Eads to remove sand and silt from river bottoms, patented July 5, 1870 (1985.0958).
- John S. Kebabian: Fillister plane patent model patented by William S. Loughborough of Victor, New York on May 10, 1859 (1985.0013).
- Fred S. Keller: teaching machine developed by B. F. Skinner for animal training (1985.0075).
- Nancy F. Kendall: 4 Christmas light bulbs (1984.0005).
- Eldridge D. Kendrick: television receiver made by the Hotpoint Co., a division of General Electric, purchased by Mr. Kendrick on December 7, 1957 (1984.0213).
- Kenmore Stamp Company (through H. E. Harris, Jr.): 61 mint stamps, 8 souvenir sheets, a postal card, and a first day cover commemorating the 1980 Winter Olympic Games at Lake Placid, New York (1984.0452).
- Gordon Kennedy: refined earthenware pitcher in the "Wild Boar" motif by Edwin and William Bennet of Baltimore, Maryland, ca. 1852; a pale green glass bottle; and a footed cut glass salt cellar (1983.0771).
- Helen Kennedy: Pilling McCallie audiometer used to measure hearing, ca. 1911 (1984.0703).
- Thomas J. Kenney: 2 Chinese amulets (1985.0325).
- Barbara A. Keppel: 446 pieces of chemical glassware and laboratory apparatus (1985.0311).
- Claudia B. Kidwell: 9 pieces of girl's clothing worn by Alison and Rachel Kidwell, 1971-81 (1985.0667).
- Eric B. T. Kindquist: 5,281 world-wide stamps, covers, and postal stationery
 items (1982.0556).
- Estate of Thelma Kinz (through Dorothy M. Test): 2 stereocards of "Park Row and Post Office" in New York and a stereocard of a mail steamer arriving in New York Harbor (1985.0761); 16 stereographic view cards (1985.0763); 5 stereographs of a White House wedding (1986.0155).
- Richard D. Kirby: electronic integrated circuit and a miniature electronic

- circuit (1984.0110).
- Donald W. Kitzman: 24 postal documents and 6 philatelic covers (1986.0068).
- Frank E. Klapthor: lot of 21 pieces of Fortuny print samples made by Mariano Fortuny of Venice, Italy, pre-WW II, and 2 fragments of Wilton carpeting, 19th century (1985.0157); croquet mallet and ball and a golf club (1985.0886).
- Margaret B. Klapthor and Mary Berry Moore: 5 Girl Scout artifacts, 3 tennis rackets, a Victor phonograph record and index of Victor records, Lion's International paperweight, Knights of Columbus wallet with traveling cards, book of the philosophy of the Odd Fellows, and a booklet of sermons (1984.0305).
- Harold Klein: U.S. Navy wooden alarm "battle" rattle, 1861-65 (1984.0342).
- Stewart E. Kleinschmidt and Doris Knight: 41 telegraph apparatus (1978.2209).
- Estate of Dorothea Elizabeth Klemme (through Katharine V. Shade): lawn mower patented by Herbert B. Newton on April 5, 1927 (1985.0285).
- Dr. Joseph H. Kler (through Marjorie Kler Freeman and Mary Kler Heisinger): 98 pewter objects reflecting the development of the pewterer's craft in America from the 17th through the 19th centuries (1986.0027).
- Russell and Ruth S. Kletzing: Cranmer abacus, Takeda abacus, and a Monroe calculator which has been converted to braille (1983.0831).
- Robert L. Klinger: souvenir medalet of the USS <u>Kane</u> commemorating the discovery of the Kennedy Channel and the Kane Basin by Elisha Kent Kane, 1853-54 (314638); 2 colored lithographs of WW I German and U.S. naval subjects (1984.0795).
- Jerome Klingfus: double-acting hydraulic air compressor manufactured by the Bishop and Babcock Company of Cleveland, Ohio, portions patented in 1894, 1895, and 1908 (1985.0803).
- Robert A. Klitzner: Loyal Order of Moose emblem (1984.0801).
- Wm. B. Knapp: cigarette card featuring Annie S. Peck (1986.0015).
- Frank M. Knox: vase of bocote wood ornamentally turned by Mr. Knox on his Holtzapffel lathe in April 1974 (1985.0483).
- Robert B. Knox: piece of sheet music, "Ballad of the Unknown Soldier," words and music by Robert B. Knox, 1984 (1985.0509).
- William H. Koch: drawing compass, sector by Le Maire of Paris, and a set of drawing instruments by Weickert of Leipzig (1984.1070).
- Estate of Roland A. Kollbeck (through Ursula V. Reuther and Sonja K. Wennerstrom): Connecticut D-Skidder automatic passenger car road sander, made by Connecticut Telephone & Electric Corporation (1984.0393).
- Ellen S. D. Kominers: book titled Pat Paulsen for President by Mason Williams with Jinx Kragen, 1968 (1985.0205).
- Herschel Kopp: cased novelty pinfire pistol with cleaning rod and 25 cartridges (1982.0298).
- Edward and Liliane Kramer in loving memory of Alfred W. Kramer: 16-piece "Architects' Tea Set" decorated with views of early American buildings, made by Lenox, Inc. of Trenton, New Jersey in 1933 (1984.1088).
- Kenyon Kramer, M.D., LTC, MC: F. A. Hardy & Co. optician's trial case of lenses, ca. 1890, and a DeZeng direct ophthalmoscope in case (1985.0092).
- Jeffrey L. Kraskin, O. D.: scleral contact lens cabinet containing 3 original trial lenses, ca. 1940 (1985.0600).
- Col. Robert G. Krause: 23 pieces of insignia and uniform medal decorations and a pair of socks (1985.0164).
- Carol L. Kregloh: curling iron and stand, 1900-30 (1981.0919).
- Laszlo Kutas: 2 foreign medals, one honoring Lukacs Gyorgy designed by Lugzlo Kutas and the second honoring Giorgio Vasari, signed Fortana (1985.0754).

- Herbert J. La Sauce: pair of metal roller skates, ca. 1929 (1986.0384).
- Lam Building Corporation (through James A. Lam): 2 Maihak diesel engine indicators and a Schaeffer & Budenberg steam pressure guage testing apparatus (1986.0467).
- Arthur E. Lamb, M.D.: pneumothorax apparatus and a lead apron (1985.0403).
- Lancaster-Fairfield Community Hospital (through Joseph D. McKelany): rocking bed used to aid the breathing of premature infants, made by Air Shields Company, 1960s (1985.0676).
- John P. Langellier: officer's forage cap insignia, 1895-1902 (1985.0540); helmet with a puggree used in the Philippine Islands, ca. 1902 (1985.0745); enlisted man's hat cord of the U.S. Signal Corps, 1891-98 (1986.0386).
- Dr. Leonard Langman: Synchronous World Clock, number 14, conceived and made by Thomas Shannon (1985.0708).
- Lapua Cartridge Factory (through Horst Zimmerbauer): small arms cartridge display board containing 29 cartridges and 6 bullets (1983.0703).
- Constance Stuart Larrabee: appointment to the U.S. Military Academy at West Point dated March 11, 1908 and a uniform coat of the WW II period, both belonging to Lt. Col. Sterling Loop Larrabee (1985.0390).
- Laser Alignment Inc. (through Bob Ford): Rod Eye-2 sensor (1985.0360).
- Lasertron Inc. (through Gary Geller): 3 stainless steel components and 3 ceramic pieces cut by laser (1985.0271).
- Arthur E. and Margaret L. Lassonde: wooden chest belonging to Captain George Perkins, USN, containing a metal saw and a reaming auger, 3rd quarter of the 19th century (1985.0726).
- Fred Lathrop, Jr., M.D.: glass transfusion apparatus for infants, 1935 (1984.1010).
- Dr. Asuncion Lavrin: 5 religious prints (1978.0646).
- Jack Lawson: 203 mint and used stamps of Turkey (1986.0400).
- League of Women Voters (through Dorothy S. Ridings): 24 transcripts, documents, press kits, programs, press releases, posters, and a banner from the League of Women Voters 1984 Presidential Debates (1985.0261).
- League of Women Voters Education Fund (through Dorothy S. Ridings): 11 documents, 6 buttons, 3 balloons, 2 T-shirts, 2 cassette tapes, a paper bag, and a banner, all from the "Taking Charge" voter registration drive, 1984 (1985.0257).
- Fran Lee: mitten cut from a sweater, sock cut from a sleeve, cap, knitted square, bikini cut from a sweater, can holders, and an earring made from a can holder, all from the career of Miss Lee as a consumer advocate and advisor (1985.0175).
- Norman D. Lee: 21 WW I U.S. Navy enlisted man's uniforms and uniform items, 3 training manuals, an officer's seabag and cover, Victory Medal, and a U.S. Naval Academy Yearbook, The Lucky Bag, 1922 (1986.0506).
- Hannah N. Lehenbauer, Roy H. Lyons, and Marcus A. Stortroen: Universal electric mixer (1982.0120).
- Marcella M. Leppien: 3-piece "Uncle Sam" suit worn by Wilburt E. Leppien, a portrait and a set of 6 photograph cards of Mr. Leppien as "Uncle Sam," and a U.S. flag (1984.0974).
- Isadore Levin, M.D.: inventor's prototype of the Levin mobil-bath (1984.1103).
- Alan and Elaine Levitt: Ajax watch insulator (1985.0955).
- Eula B. Lewis: 7 pieces of woman's clothing and accessories, 5 pieces of infant's clothing and shoes, 3 girl's dresses, a man's bow tie, and a pair of boy's gloves (1983.0810); wooden trunk, 1920-40 (1984.1126).

- Grace E. Lewis: watch in silver travel case (1984.1130).
- Library of Congress Philatelic Club (through Richard E. Henthorn): 759 world-wide used postage stamps (1984.0382).
- Joel F. Liebman: 96 pieces of microanalytical chemical glassware (1985.0748).
- Mrs. Max Liebman: tape recorder, amplifier, microphone, and stand (1984.0020).
- Marla Ann Lind: uniform worn and materials used by Marla Ann Lind, the Offical Hostess of the 1984 Los Angeles Olympic Games (1984.0943).
- H. L. Lindquist Publications Inc. (through James A. Morton, Jr.): 1,536 philatelic covers, 7 cachets, and 3 post cards from around the world (1984.0224).
- Marjorie Van Roden Lis: U.S. Navy enlisted man's dress blue uniform jumper, bell-bottom trousers, flat hat, and a neckerchief, all WW I (1984.0142).
- John Lockwood: plastic figure of "Mighty Mouse" with a red cape, late 1950s (1985.0635).
- Loral Electro-Optical Systems (through Donald L. Rowe): Miles infantryman's harness and helmet band and a MIG rifle transmitter assembly (1984.0902).
- Jack Lord: .38 caliber Colt "Cobra" revolver with holster used by Jack Lord in the television series "Hawaii 5-0" (1984.0420).
- Los Alamos National Laboratory (through Judy A. Morris): glass vial containing approximately 100 ICF targets (1985.0143).
- Los Angeles Olympic Organizing Committee (through Carol C. Daniels): 17 artifacts relating to the 1984 Olympic Games in Los Angeles, California (1985.0297).
- Franklin Loucks, Jr.: 87 pieces of U.S. Navy Reserve officer and enlisted men's uniforms and uniform items, WW I (1984.1025).
- Louisiana World Exposition, Inc. (through Petr L. Spurney): costume of Seymore D. Fair, pelican mascot of the 1984 Louisiana World Exposition (1984.1041).
- LaVerne M. Love: key chain, newsletter, membership brochure, and a folder from the 1978 International Women's Year meeting in Washington, D.C. (1978.1036).
- Pearl Loveall: photograph of a broom presented to Mrs. Benjamin Harrison in honor of the presidential inauguration on March 4, 1889, by Jas. Peery & Co. of Humboldt, Kansas (1984.0876).
- Hannah E. Lowe: LCD wrist watch with Optel movement by Wittnauer, Swiss-made quartz LCD wrist watch, and a Dynotron mechanical/electronic watch (1985.0961).
- Judith N. and Milton L. Lowell, M.D.: Felt and Tarrant comptometer with pamphlet, ca. 1910 (1985.0120).
- Carol E. and Ted Lowry: annunciator (1985.0737).
- Eurania M. Loye: photograph of President James A. Garfield and a photograph of his mother. Eliza Ballon Garfield (1985.0944).
- Victor J. Lucas: farm wagon built by the Kramer Wagon Company in the 1930s (1984.0743).
- LUCASFILM, Ltd. (through Howard Roffman): 2 robot costumes, Artoo-Detoo and See-Threepio, both from the <u>Star Wars</u> saga motion pictures (1984.0302).
- Jerold F. Lucey, M.D.: phototherapy unit with set of light bulbs used to treat hyperbilirubenemia in premature infants (1985.0163).
- Dennis B. Ludlow: unused postage stamp of Queensland, Australia (1985.0585).
- Philip K. Lundeberg, Ph.D.: 14 items of U.S. Navy Reserve officer's uniform and uniform items, ca. 1970 (1985.0189).
- Barbara M. Luther: notebook issued by The Office of Women's Activities,
 Democratic National Committee, Washington, D.C., ca. 1960 (1985.0130).
- Francis L. Lynch: fragment of printed cretonne fabric and fragment of

- "linsev-woolsev" fabric (1986.0288).
- Arthur Lyon: diary of a motor trip from New York to Managua, Nicaragua, 1930 (1985.0609).
- Dr. Kenneth C. MacKay: 4 pairs of painted and embroidered plainweave muslin curtains from the McKay-Lum household in Madison, New Jersey, early 20th century (1986.0287).
- John E. MacKenty: Ernst Leitz "Wetzlar" microscope, Carl Zeiss "Jena" microscope, and a Taylor Instrument Co. "Tycos" recording sphygmomanometer (1984.0640).
- Sarah E. Macklin: 5 daguerreotypes, 3 tintypes, and an ambrotype of portraits of various people (1985.0289).
- Mrs. Macombe: pair of woman's shoes, 1806 (1985.0951).
- Macro Systems Inc. (through Frank J. Quirk): Perkin-Elmer Interdata 7/32 minicomputer consisting of a set of panels, set of 3 circuit boards, central processing unit, and a power supply (1983.0714).
- Joseph F. Madeo, Jr.: flare gun with flares made by the International Flare Signal Co., ca. 1930 (1979.0414).
- Christine M. and Christopher M. Magee: 15 items of children's clothing (1985.0792).
- Larry Magid: Seeburg "Symphonola" jukebox, ca. 1935 (1984.0607).
- Henry Ellicott Magill (through Richard E. Allen): framed embroidered silk pastoral scene possibly sketched by Samuel Folwell and embroidered by a school girl in the early 19th century (1986.0190).
- Robert F. Mahar, D.D.S.: McConnell portable dental chair made by Southern Novelty Works, ca. 1911 (1985.0902).
- Margaret U. Malone: 3 medals, a pennant of the 309 Machine Gun Squadron, bronze collar insignia, and a copy of orders from General Pershing, all of which belonged to Sgt. John Peter Schwoebel during WW I (1984.0685).
- Manhattan Bridals and "Tux" Stores (through Michael Newhall): 2 man's hats, a top hat, 1850-70 and a derby, 1880-1940 (1985.0711).
- Mrs. Florence M. Manley: U.S. Navy enlisted man's hat ribbon embroidered "USS OHIO," WW I (1984.0152).
- Milo C. Manly: black and white photograph of the 9th Annual Conference of the National Urban League, held in Kansas City, Missouri, October 16-19, 1923 (1985.0905).
- Beatrice Perry Marcus: "Pocket" Seneca camera with a glass plate film holder and an Eastman Kodak film pack adapter (1986.0106).
- Jack Markowitz: Burroughs electro-mechanical typewriter (1985.0952).
- James Marks II: necklace with cross and 8 buffalo nickels given to a newborn Gypsy baby and a red rayon sash worn at a Gypsy wedding (1985.0971).
- Caryl Marsh: woman's black lambskin leather Yves Saint Laurent skirt and an off-white sweater, 1978-79 (1985.0668).
- Dr. W. T. Marshall: pair of pince-nez spectacles, ca. 1900 (1985.0502).
- Albert R. Marti: 19 postcards of U.S. Naval warships, ca. 1910 (1985.0903).
- Chester Martin: bronze Food and Agriculture Organization (FAO) medal struck to commemorate World Food Day, October 16, 1984 by U.S. medallist Chester Martin (1985.0913).
- Maryland State Highway Administration (through Thomas Hicks): Maryland U.S. 40 route marker sign, ca. 1950 (1984.0937).
- Eva B. Mason: "Localizing Induction Pad" electric blanket with booties and head covering used by a polio victim for heat therapy, 1920s (1984.0913).
- John R. Mason: 1918 cover franked with a demonetized 3-cent U.S. postage stamp of 1857 issue (1985.0569).
- Mary W. Mason: 19 dance programs, ca. 1920 (1985.0402).

- Frank M. Masters, Jr.: book titled The Merchant and Seaman's Expeditious Measurer..., 1922 (1986.0509).
- Rebecca Matthias: 5-piece maternity outfit for a business woman, 1985 (1985.0663).
- Maurice PNC's: first day cover commemorating Maine Statehood issued July 9, 1970 (1984.0514).
- J. O. McCall, M.D.: 6 books written by Dr. John Oppie McCall about dental techniques and the dental profession, and an engraved gavel and the Fones Medallion Award given to Dr. McCall (1984.0643).
- Earl A. McClain: Marchant calculating machine (1985.0821).
- Jean P. McCormick: 53 items of U.S. Army insignia, uniform accessories, and equipment, a flag, and a folio of Ogden Uniform Study Plates, 1941-50 (1982.0652).
- 2nd Lt. Shannon L. McGurk: coat, trousers, boots, scarf, and a belt composing a uniform from the Officer's Training School at Fort Benning, Georgia, 1982 (1984.0295).
- Dorothy M. McHenry: gold watch presented to Senator Steven A. Douglas on a trip to California in 1859 (1985.0852).
- Eugene C. and Francis E. McKay: safety razor kit issued to Francis E. McKay upon entry to active military duty at Camp Lee, Virginia in July 1943 and used by Eugene C. McKay while serving in the U.S. Navy in Vietnam until 1969 (1985.0229).
- Mary Ursula McLaughlin: 8 badges, 3 buttons, and a silver fob, all relating to the Pittsburgh Fire Department and Fireman's Association, 1910-15; a metal match box marked "McCathy's;" and an advertising can opener (1984.1038); 6 school and organization pins, a high school ring, 1929, and a membership card from the Loyal Order of Moose, 1964 (1985.0804); 5 medals for Mexican Border Service by the Michigan and Pennsylvania National Guards, ca. 1916, and 2 lapel pins and a medal for Spanish-American War service, 1898 (1986.0096).
- David J. Mears: 35 pieces of political memorabilia including buttons, posters, documents, bumper stickers, bags, tickets, a tie clip, record, and an "Inaugural Spectacle" edition of <u>LIFE</u> magazine, 1960-76 (1985.0362).
- Mechanics Educational Society of America (through Robert W. Briggs): 2 buttons and a sheet of stationery for the Mechanics Educational Society of America (1986.0268).
- MedaSonics (through Tom Rice): Doppler model BF3A blood flow fetal pulse detector ultrasound stethoscope and an automatic speaker SA-2 with a wire connector (1986.0416).
- Medtronic, Inc. (through David Levy): Classix model cardiac pacemaker (1985.0148).
- John Megel: 2 letters of correspondence, one dated August 7, 1939 to Mr. Lewis signed by Eleanor Roosevelt and the other dated March 4, 1938 to Mrs. Grueninger from Malvina R. Scheider, secretary to Eleanor Roosevelt, both relating to Gypsy-Americans (1985.0442).
- Betty J. Meggers: 3 maximum cards, a souvenir card, and a first day cover, all related to the 1985 International Philatelic Exposition at Madrid, Spain (1985.0696).
- Vernon H. Meier: rural letter carrier's leather mailbag, ca. 1920 (1986.0172). Grace Mellon: General Delivery window unit from the Arvonia, Virginia Post Office, ca. 1905 (1985.0389).
- Ink Mendelsohn: sheet music for the song "But Beautiful" from the motion picture Road to Rio (1986.0031).
- Patricia and Sewall H. Menzel: 55 Spanish Colonial coins (1984.1123).

- Sewall H. Menzel: 4 silver Spanish cobs struck at Potosi (1985.0239); provisional issue 2-reales coin of Honduras dated 1824 (1985.0331).
- Robert T. and Rose S. Merriam: Revolutionary War period silver epaulet attributed to Major Moses White (1985.0451); diary account book of Elizabeth Amelia White, 1791-1805 (1985.0469); 2 daguerreotypes, an ambrotype, carte de visite, and a set of 3 silhouettes, all of members of the Merriam, Putnam, and White families (1985.0472).
- Olive G. Merritt: set of 68 little wax patterns for penny candy used as salesmen's samples (1984.0862).
- Metal Trades Department, AFL-CIO (through Paul J. Burnsky): tie tack, badge, and a sheet of stationery for the Metal Trades Department, AFL-CIO (1986.0339).
- Mexican Border Veterans Incorporated (through Howard M. Hubbard and Fabian E. Johnson): 2 flags with poles, eagles, and cases, 2 hats, and a felt pennant, all relating to the Mexican Border Veterans (1984.0781).
- Marie Mims Meyer: diesel engine made for use in powered ships by the Atlas Imperial Diesel Engine Company of California, 1941 (1985.0282).
- Carol E. Meyers: 2 supplemental mileage ration cards for extra portions of gasoline during WW II (1984.0818).
- E. B. Meyrowitz, Inc. (through Robert G. Luckie, Jr.): microscope used in cornea surgery manufactured by E. B. Meyrowtz, Inc. of New York, ca. 1900 (1984.0064).
- Mary G. Millar: glass mug labelled "KNIGHTS of LABOR," late 19th century (1986.0169).
- Ann Miller: pair of tap shoes named "Joe" and "Moe," worn by Ann Miller, 1939-84 (1984.1012).
- Dorothea S. Miller: pair of man's silver military brushes, 1920-60 and a 2-piece man's suit, 1955, used by Frank C. Miller (1983.0851).
- Martin R. Miller-Hessel: double page of the <u>Alabama Journal</u> of Selma dated March 22, 1965 containing public service commentaries on the forthcoming voter registration demonstration (1980.0508).
- Miriam Gallogly Millies: Lyon & Healy concert harp with string gauge, tuning hammer, and case, ca. 1893 (1985.0440).
- Basil and Georgia Taylor Milovsoroff: 3 puppets named "Baba Yaga," "Koschei," and "Leshyi" and a painting titled <u>Hat on Chicken Legs</u>, all made by Basil Milovsoroff (1985.0398).
- Minnesota Historical Society, Division of Archives & Manuscripts (through J. M. Wickre): stereograph of "Fairmount Park" with a railroad bridge, ca. 1870, stereograph of "Towers of the East River Bridge," and a stereograph of a building after a boiler explosion (1985.0083).
- University of Minnesota, Aerospace Engineering and Mechanics (through Prof. W. L. Garrard): 12 mechanical strain gauges and 2 sets of mounting brackets (1985.0966).
- The University of Michigan, The Harrison M. Randall Laboratory of Physics (through Donald I. Meyer): replica of Donald Glaser's 6-inch hydrocarbon bubble chamber, ca. 1954 (1980.0356).
- Louis Mittelman, Jr.: Commodore PET 2001 microcomputer with 2 circuit boards and 5 books and pamphlets of instructions (1985.0591).
- The Ugo Mochi Family (through Douglas K. and Joanne (Mochi) Gray and Dr. Anthony T. and Jeanne (Mochi) Tartaglia): 32 black cut-out pictures of "Ladies of the White House" by artist Ugo Mochi done in the 1940s and 42 miscellaneous leaflets and papers about Mr. Mochi (1984.0231).
- Ludmila Markoff Moghadam in memory of Leo Markoff Moghadam: 236 ancient Persian and Indian coins (1985.0240).

- Mohawk Data Sciences (through David C. Dix): reel of magnetic tape for Mohawk Data Sciences data recorder (1985.0119); (through David C. Dix and Brian D. Duggleby): Model 1101 keyed data recorder with documentation (1984.1011).
- Government of the Principality of Monaco, Postal Administration: 22 mint stamps and souvenir sheets of Monaco (1983.0368); 27 mint stamps and souvenir sheets of Monaco (1983.0636); 26 mint stamps and 2 souvenir sheets of Monaco (1984.0599); Postes et Telecommunications, Office des Emissions de Timbres-Poste: 26 mint stamps and a souvenir sheet of Monaco (1984.1083).
- The University of Montana, School of Forestry, Montana Forest and Conservation Experiment Station (through Benjamin B. Stout): Webb's Stadia slide rule (1983.0472).
- Montclair Co-Operative School (through Lauretta B. Freeman): peace banner segment of flowers, forest, clouds, river, and sun made by the children of Montclair Co-Operative School for the August 4, 1985 rally (1985.0948).
- Earl E. Moore: financial document of the U.S. Mint concerning the importation of specie for the week ending November 30, 1839 (1985.0531).
- Howard Moorefield: copy of a letter signed by Dwight D. Eisenhower to "Soldiers, Sailors, and Airmen of the Allied Expeditionary Force!" on D-Day, 1944 (1984.0474).
- Moral Majority, Inc., American Coalition of Traditional Values (through Tim LaHaye): 39 leaflets on "How to Register Voters in States," 6 letters, 2 Moral Majority Report newspapers, a "National Voter Registration Leadership Manual," and a poster, "Protect Your Traditional Values/Register & Vote" (1985.0129).
- Elting E., John H., and Robert S. Morison: 6,240 archival materials collected by George S. Morison during his career as a civil engineer in the late 19th century (1984.1093).
- Cynthia Taft Morris: book, <u>Treasure Island</u> by Robert Louis Stevenson, read by Charlie Taft while his father, William Howard Taft, took the oath of office as President of the United States (1986.0420).
- Owen D. Mort, Jr.: 92 ancient and medieval coins acquired in Afghanistan (1985.0368).
- Lt. Col. William B. Mosey: yarn cone with a paper label printed in a "Victory" design, WW I (1985.0898).
- Kenneth W. Moss M.D.: hand-blown glass suction trap with rubber catheter and a transport incubator (1984.0709).
- William D. Mullinix: soundscriber model with 7 accessories (1985.0089).
- Diana and Rhettman A. Mullis: 38-star U.S. national flag made in the 1860s (1984.1082).
- Mrs. John H. Murray: 6 19th-century fashion plates (1985.0005); 19 pieces of early 20th-century textiles and needlework tools and accessories (1985.0156); woman's bracelet, necklace, compact, earrings, and cuff buttons, 1920-30 (1985.0872); 19 pieces of 20th-century textiles and needlework tools (1985.0973).
- E. P. Muth, Ph.D.: 567 eyeglasses, 154 lenses, 72 miscellaneous tools, and 43 eyeglass cases (1984.0140); set of eyeglass lenses for examination use (1984.0285).
- Ruth E. Myer: folder of 28 pamphlets and sheets pertaining to psychological testing (1983.0168).
- Susan H. Myers: 4 stereo view cards showing policemen at work, produced by the Keystone View Co. as part of the "Public Helpers" series (1985.0942); 19 stereographs showing the stages in making cylinder window glass, 1900-25;

- a stoneware jug stamped "J. & J. Reakirt Wholesale Druggists," 1850-80; stoneware jug patented by Henry Robinson and Richard Whitmore in 1882; a stoneware footwarmer made by Dorchester Pottery Works of Boston and patented in 1912; and a whiteware covered dish made by Thomas Maddock's Sons Co. of Trenton, New Jersey, early 20th century (1985.0963); 6 Keystone View Company stereographs of postal employees at work (1985.0969).
- Mystic Seaport Museum (through B. A. G. Fuller): 3 half models of early 20th-century U.S. submarines (1984.0955).
- Thomas Naff for the Faris and Yamna Naff Family Arab-American Collection: 59 artifacts used by Arab immigrants to America, 1890s to 1940s (1984.0218); 23 phonograph records, 7 pamphlets, 4 coffee cups, 3 pieces of needlework, a blue glass bead, pair of metal tongs, and a water pipe (1984.0500); mortar and pestle set, wooden pestle, plaque, embroidered pillowcase, leather pouch, and a group of 39 WW II memorabilia of Wedad Frenn (1984.1137).
- Dr. Perham C. Nahl: 23 first flight covers (1985.0357); 216 philatelic covers from contract air mail flights (1985.0818).
- National Alliance of Postal and Federal Employees (through Shirley E. Davis and Robert L. White): button, "NAPFE;" decal, "National Alliance of Postal and Federal Employees Founded 1913 'Ad Mortem Fidelis;'" and a sheet of letterhead (1986.0236).
- National Association of Broadcast Employees & Technicians (through Robert W. Lind): 3 decals, 2 sheets of stationery, a sticker, lapel pin, newspaper, and a sheet of 4 union labels, all relating to the National Association of Broadcast Employees and Technicians (1986.0358).
- National Association of Letter Carriers (through Candance H. Main): 2
 videotape cassettes of the TV commercial "Delivering for America," 2
 videotape cassettes of N.A.L.C. radio spots, 1985 and 2 broadsides of the
 promotion prepared for N.A.L.C. TV campaign "Headin' Out Across America
 Spreading the Word, near and far..." (1986.0911).
- National Education Association (through Lyle Hamilton): 6 stickers, 3 pamphlets, 3 sheets of union labels, 2 sheets of stationery, 2 stick pins, 2 buttons, a videotape cassette, lapel pin, and a book, all relating to the National Education Association (1986.0352).
- National Engineering Products, Inc. (through Fay M. Peterson): adding machine and stand made by Allen Wales Division of the National Cash Register Company (1986.0397).
- National Federation of Federal Workers (through Abraham Orlofsky and James M. Peirce: 2 sheets of stationery and a button for the National Federation of Federal Employees (1986.0362).
- National Industrial Workers Union (through Alonzo Wheeler): sticker, sheet of stationery, and a button, all relating to the National Industrial Workers Union (1986.0338).
- National Organization for Women, Inc. (through Lois Galgay Reckitt): 2 buttons and 2 bumper stickers relating to the Mondale/Ferraro presidential campaign in 1984 and a button, "Witness For WOMEN'S LIVES June 8, 1985" (1986.0115).
- National Railway Publication Company (through Paul H. Moore): map of the United States showing time zone boundaries in 1883 before the adoption of standard time (1983.0024); 2 copies of the <u>Travelers' Offical Guide</u>, December 1882 and 1883 (1984.0472).
- National Republican Congressional Committee (through Joseph R. Gaylord): 2 videotape cassettes of television advertising run during the 1984

- election year for the Republican Party (1985.0527).
- National Rural Letter Carriers' Association (through Tom W. Griffith): sticker, lapel pin, and a sheet of letterhead, all with the National Rural Letter Carriers' Association logo (1986.0293).
- The National Yeoman (F) (through Mrs. Irene M. Brown): 10 copies of The Note Book, 1979-84 (1984.0432); 8 copies of The Note Book, 1982-83 (1985.0248); (through Marjorie Slocum): 48-star U.S. national flag, Yeoman F flag with 2 ornamental poles, 2 cases, and 2 sling carriers, a set of 2 caps, cap pin, and a web belt with buckle (1985.0307).
- Gail Reynolds Natzler and Otto Natzler: electric kiln made by Elektro-Heizungstechnik of Vienna, Austria, ca. 1935, used by Otto and Gertrude Natzler from 1935 to 1982 for firing their studio pottery (1982.0813).
- The NDK Company (through Dr. John W. Emmer, A.B., D.D.S., F.R.S.H.): bottle of NDK liquid flouride-germicide dentifrice developed from research by Dr. Emmer (1984.0837).
- Shirley F. Needham: Women's Army Corps overseas style cap of enlisted rank, 1940s (1985.0262).
- Thomas Neely, Jr.: 23 pieces of fire and burglar alarm apparatus (1984.0255). Lenna J. Neff: Ku Klux Klan robe, sash, and a hood (1986.0246).
- Government of the Netherlands, PTT Headquarters, Postal Department: 9 mint stamps and a souvenir sheet of the Netherlands (1983.0562); 11 mint stamps of the Netherlands (1984.0297); (through A. W. van Ommeren): 7 mint stamps and 2 souvenir sheets of the Netherlands (1984.0672); 13 mint stamps of the Netherlands (1985.0153).
- Elice E. Neubauer: panel of cotton white-on-white embroidery, late 19th to early 20th century (1985.0643).
- New Jersey State Museum (through Maxine Friedman): Washington City Canal lottery ticket, ca. 1810 (1986.0183).
- New Mexico Rural Electrification Cooperative (through Carl. M. Turner): sad iron (1985.0260).
- The City of New York, Fire Department, Division of Fire Communications (through Lewis J. Harris and George J. Murasso): 10 fire alarm boxes (1980.0007).
- Government of New Zealand, Post Office, Philatelic Bureau: 11 mint stamps and a souvenir sheet of New Zealand (1983.0519); (through G. W. Warner): 12 mint stamps and a souvenir sheet of New Zealand (1984.0157); 15 mint stamps and 2 souvenir sheets of New Zealand (1984.0681); 13 mint stamps of New Zealand (1985.0108).
- Mary L. Newbold: "Golden Gem" adding machine in carrying pouch, ca. 1908 (1981.0935).
- Charles E. Newell: equatorial sundial made by Nicolas Rugendus of Augsburg, Germany, 18th century (1985.0231).
- Nancy L. and Paul Newfield: bus seat sign "For Colored Patrons Only" (1979.0131).
- Lt. Jean Q. Nguyen-Doyne: 6 uniform items worn by Lt. Nguyen-Doyne as the first native Vietnamese woman to graduate from the U.S. Military Academy at West Point (1985.0926).
- Charles F. and William G. Nichols: 6-piece seed pearl parure in its original leather box, 1836, and a seed pearl earring, 1830-50 (1984.0696).
- Raymond W. Niemann: postal sub-carrier's badge, number 8492, assigned to an employee at Chicago, Illinois, ca. 1923 (1986.0482).
- Ann S. Niess: locket with 6 miniature photographs of British royalty and a spyglass viewer with 6 miniature photographs of Malvern (1986.0454).

- Government of Niue, Niue Post Office, Philatelic Bureau: 9 mint stamps and a first day cover of Niue (1983.0520); 8 mint stamps, a souvenir sheet, and a first day cover of Niue (1984.0052); 8 mint stamps, a souvenir sheet, and a first day cover of Niue (1984.0870); 5 souvenir sheets, 4 mint stamps, and a first day cover of Niue (1985.0115); 5 mint stamps, 5 souvenir sheets, and a first day cover of Niue (1985.0558).
- Pamela B. Nolan: pair of opaque-white molded-glass vases made by the Westmoreland Glass Company of Grapeville, Pennsylvania, 20th century (1984.0714).
- Elliot Northcott: U.S. Army issue WW I period jerkin and WW II period combat boots (1984.0655).
- Northern Sun Alliance (through Henry Fieldseth): 2 issues of the Northern Sun News, July/August and November 1984 (1984.0980).
- Northrop Corporation (through Fred Stoughton, Jr. and J. W. Taft): 2 videotape cassettes of television commercials about Northrop and its U.S. Government defense contracts (1985.0526).
- George A. Norton: Triangulator calculating device with leaflet used by Mr. Norton while an apprentice, ca. 1954 (1986.0441).
- Government of Norway, General Directorate of Posts: 6 mint stamps, 3 first day covers, and a souvenir card of Norway (1983.0441); 14 mint stamps and 6 first day covers of Norway (1984.0226); 5 mint stamps and 2 first day covers of Norway (1984.1077).
- Dennis H. O'Brien: rural mailbox designed for letter carriers on horseback used in McLennan County, Texas, early 20th century (1985.0235).
- Justice Sandra Day O'Connor: black judicial robe worn by Justice O'Connor during her swearing-in ceremony (1985.0854).
- Official Presidential Inaugural Commemoratives (through Jerry L. Wallace): 2 belt buckles, 2 books, a souvenir tankard, porcelain rose, sweatshirt, plate, elephant, and a poster, all souvenirs from the 1985 inaugural (1985.0361).
- State of Ohio (through Sherrod Brown): 4 absentee ballots filled out by Ohio men serving in the Union Army and a tally sheet from Delaware County, Ohio, all from the presidential election of November 8, 1864 (1985.0426).
- Oil, Chemical & Atomic Workers International Union (through Joseph M. Misbrener and Michael Ricigliano): button, "Oil, Chemical & Atomic Workers Int'l Union AFL-CIO" and a sheet of letterhead, "OCAW" (1986.0234).
- Katherine K. Olsen (through Richard R. Stout): sampler embroidered by Elizabeth Shermer, dated 1833, in a painted wooden frame (1985.0856).
- Mrs. Edwin T. Olson: Massachusetts Reserve State Guard uniform worn by Edwin T. Olson, 1941-42 (318957).
- Marilyn R. Olson: 2 yearbooks, a black gym suit, report card, and a student's streetcar identification card, all used by Ruby Magnuson Hedlund while attending Lincoln High School in Seattle, Washington, 1920-21 (1986.0410).
- Storrs L. Olson: 4 Ethiopian bank notes (1986.0181).
- Operative Plasterers' and Cement Masons' International Association of the United States and Canada (through Robert J. Holton): 29 miscellaneous items relating to the Operative Plasterers' and Cement Masons' International Association of the United States and Canada including decals, stationery, envelopes, patches, placards, centerpieces, stickers, travel kits, placards, a folder, hat, key chain, deck of playing cards, poster, and a tie tack (1986.0233).
- Mrs. Richard Ordway: E. Howard & Co. pocket watch with "Hunter" case, ca. 1866 (1984.1085).

- Irene B. and Joseph J. Orosz: letter carrier's uniform jacket (1986.0458).
- Prof. George E. Osborn: medicine case prepared by the Clarke Homeopathic Pharmacy of Providence, Rhode Island, ca. 1860 (1985.0279).
- Thomas E. Osborne: notebook of purchase orders for the "Green Machine," a prototype calculator (1985.0264).
- Hilda N. Oseas: linen tablecloth with woven pattern of harvest wreath with 4 tassles made by Elizabeth Fisk Looms, 1925 (1986.0037).
- Fred F. Osterholtz: Westinghouse radiographic dental X-ray tube, 1931-35 (1984.0546).
- Benjamin Wade Owen: 3 stacking trivets and a red earthenware kiln pot (1982.0535).
- Carolyn M. Paonessa: 2 handstamp trial impression cancellations on paper used on "first trip" from Washington, D.C. to New York to Philadelphia Air Mail, May 15, 1918 (1985.0648).
- Parker Brothers (through Philip E. Orbanes) and <u>People</u> (through Katherine M. Bonniwell): board game, "People Weekly Trivia Game," 1984 (1986.0402).
- Gail W. Parker: 14 pieces of uniform items, accessories, and insignia used by Mrs. Parker during her military career, 1972-81 (1986.0067).
- James F. Parker: multibladed folding knife made by George Wostenholm & Son of Sheffield, England, a folding knife with 48 blades and engraved with American patriotic scenes made by T. Renshaw & Sons of Sheffield, England, and a folding knife with 100 blades including a pinfire revolver made in Germany, all made in the 19th century (1986.0101).
- E. Brooke Parkinson: jacquard woven all white cotton bedcover, "Patent No. 2196 A.D. 1881" (1986.0161).
- Ruth M. Parks: brass pocket sundial made by C. Stedman (1986.0599).
- Kim Parley: woman's demin trousers patched and decorated by Ms. Parley in 1977 and a cotton tank top (1983.0852).
- Henry S. Parrish: worm for muzzle-loading firearms, iron bullet mold, box of percussion caps, set of 3 tools, spur, pin and needle cushion set used by a soldier in the Civil War, wooden plane, Southern Cross of Honor medal, WW I dog tag, wooden tube with hairpin, military coat button soldered to copper pin, powder flask, transcribed letter of July 19, 1912, and a metal container with blade-shaped tool (1979.0233).
- Parsons, Brinckerhoff, Quade & Douglas, Inc. (through Rose E. Reichman): 5 motion picture films of engineering subjects (1985.0443).
- James Parton: bronze medal commemorating Harvard Lampoon's 100th anniversary, 1876-1976 (1985.0602); bronze medal concerning the "Campaign Before Richmond, 1864" given to Mr. Parton's grandfather, an historian, by General Benjamin Butler (1985.0612).
- John B. Pate: deck of 53 aluminum playing cards and cover, souvenir of St. Louis World's Fair, 1904 (1984.0478).
- Harriett Patterson: lithograph titled Michigan Central Railroad Train Stop at Niagara Falls (1985.0038).
- Mrs. Jefferson Patterson: 61 items of clothing accessories and jewelry of the 20th century (1983.0735).
- Harry J. Patton: Philadelphia asparagus buncher (1981.0803).
- Helen E. and John R. Payne: Learcorder with microphone (1984.0901).
- Robert E. Peary, Jr.: 3 maps illustrating the progress of Polar Exploration, 1800-1909, 2 silver loving cups presented to Commodore Robert E. Peary in 1909, and a Delta Kappa Epsilon fraternity flag carried by Peary to the North Pole in 1909 (1985.0514).
- Sidney A. Peerless: 30 ancient Greek silver and bronze coins (1934.1122); 11

 Roman and Byzantine gold, silver, and bronze coins (1934.1124); 58 Greek

- coins, 5th-3rd centuries B.C. (1985.0938); 40 Sudanese Seige paper notes, 1884 (1985.0939).
- Dane A. Penland: child's blue denim cap with a Woody Woodpecker patch (1986.0383).
- Pennsylvania State University, College of Earth and Mineral Sciences Museum (through David E. Snell): 3 pieces of breathing appliances and 2 fabric safety belts with lines used in mines (1980.0814).
- Government of Penrhyn, Penrhyn Post Office, Philatelic Bureau: 10 mint stamps, a souvenir sheet, and a first day cover of Penrhyn (1983.0489); 16 mint stamps of Penrhyn (1984.0293); 9 postage stamps, 3 covers, and 3 souvenir sheets of Penrhyn (1984.0930).
- Penwalt Corporation, S. S. White Division (through Quentin M. White): 89 dental artifacts, 1900-50 (1981.0752).
- Charles W. Per-Lee in memory of Mary B. (Chastain) Per-Lee: 2 watercolor paintings, one depicts a young boy eating watermelon and the other depicts a woman combing a girl's hair, ca. 1900 (1986.0419).
- Franklin P. Perdue: 2-escudos gold coin, a gold disc, and a woman's gold chain necklace from the Spanish galleon La Nuestra Senora de Atocha, which sank off the Marquesas Keys in 1622 (1984.1141).
- Dr. Seymour Perlin: 2 "Lacy" pressed glass sauce dishes, one colorless and one amethyst, in the "Roman Rosette" pattern, ca. 1935 and 2 miniature red earthenware pitcher and jar toys, 19th-century American (1985.0105).
- E. W. Peterkin: patent model for an "Improved Bed Fastener," patented by Elisha E. Everett (314542).
- Arnold C. Petersen: Postmaster's Account and Record Book for the fourth class office at Breathedsville, Maryland, 1912-15, with 17 inserted forms and receipts (1985.0694).
- Cliff Petersen: patent model for a brick press patented on August 21, 1849 by Charles Carnell and a patent model for a brick-making machine patented on November 6, 1855 by Alex H. Brown (1984.0481).
- George A. Petersen: U.S. Navy emergency ration can for life rafts, WW II (1984.0063).
- Mendel L. Peterson: 78 late 19th- and early 20th-century U.S. Army cap and collar insignia (1982.0185); 2 letters which mention the Carson City Mint, dated 1844 and 1882 respectively (1984.1020); 6 pieces of Arctic gear including a green ski parka, pair of green ski pants, pair of brown Arctic boots, and a pair of brown ski boots, all worn by Mendel Peterson during a 1945 expedition (1986.0522).
- Edward M. and Kathleen Pflueger: porcelain figure of seated monkey made in Meissen, Germany, ca. 1727 (1980.0951).
- Phillips Petroleum Company (through C. F. Cook): 2 replicas of an assembled and unassembled Marlex discovery reactor for high density polypropylene, a sample of Marlex 20, sample of Marlex 6009, and 5 photographs relating to Marlex (1983.0570).
- Photon Sources, Inc. (through Gregory G. Pawloski): 10 laser-welded samples (1985.0317).
- Photopia Images (through Dave Parrish, Jr.): 2 posters for the 1984 Democratic National Convention held in San Francisco (1984.0987).
- Francis Pichard: bronze art medal commemorating the French National Riding School in Saumur, France (1985.0721).
- Antonietta Picone: fan, border of crochet work, bridal handkerchief, prayerbook and container, crib cover, crocheted doily, and a runner, all belonging to Vencensina Attard Picone of Porto Empedocee, Sicily (1985.0245).

- James F. Pinkney, Jr.: U.S. Army steel helmet worn by James F. Pinkney during WW I (1982.0207).
- Michael Pizitz: 15 mint postage stamps of Austria, Bavaria, France, Spain, Switzerland, and Italian States (1984.1132).
- Plantronics (through Joseph E. Compton): VUSET computer terminal with keyboard, touch tone telephone, and power unit (1980.0008).
- David Plowden: 57 photographs of bridges of North America (1984.0322); 30 photographs illustrating steel production from taconite pellets to the finished coiled sheets (1984.0827).
- Plymouth Antiquarian Society (through Dorthea M. Anderson and Anne Sargent): 100-pound piece of gray granite which was part of Plymouth Rock (1985.0316).
- Saul Pollock: 2 transmit-receiver terminals, 2 acoustic couplers, and 2 relay apparatus, all part of a communications system for the deaf, ca. 1965 (1981.0245).
- Lisa S. Popeil for the Popeil Family in memory of Samuel J. Popeil: "Veg-O-Matic II" food cutter, 1975 (1986.0222).
- Potomac Polo Club (through Joseph O. Muldoon, Jr.): polo ball (1984.0522).
- James A. Potts: T-shirt, belt buckle, pin, and an automobile plate commemorating athlete Jim Thorpe in the town of Yale, Oklahoma (1984.0864).
- Robert K. Powell: U.S. Army Air Force astro-compass used for airborne navigation and its case, WW II (1984.0143).
- Heloise B. Power: "Lotus Ware" ceramic pitcher made by Knowles, Taylor and Knowles of East Liverpool, Ohio, 1890-97 (1986.0894).
- John C. Power: 14 political buttons and 2 political badges made by John Power Badges, 1975-78 (1984.0884).
- The Pressure Positive Co. (through Bernard L. Gladieux, Jr.): "Backnobber" used in muscle therapy (1985.0220).
- Howard Price in memory of his son Barry E. Price: world-wide collection of 2,273 mint postage stamps depicting flowers, and 110 miscellaneous foreign mint postage stamps (1983.0639).
- Princeton University, Department of Astrophysical Sciences (through D. B. Hortenbach): polarizing photometer used by Raymond Smith Dugan in his study of eclipsing binaries and intrisic variables (1985.0801).
- Linda T. Puller: poster from the Mondale-Ferraro presidential campaign of "Liberty Leading the People -- 1984" by Kip Overton (1984.1052).
- Gordon Purdy: porcelain plate with replica of the "Great Seal of the United States" by Pickard, Inc., 1982 (1984.0520).
- Quantum Laser Corporation (through Andrew G. Blake): sample of tool steel laser clad with cobalt base alloy (1985.0296).
- Dr. Grace Shover Quinn and Dr. Robert B. Quinn: alto recorder with instruction pamphlet (1983.0873).
- Qume Corporation, A Subsidiary of ITT (through J. Simpson): Sprint 5/55 printer made by Qume Corporation with power supply and 2 operating manuals (1983.0167).
- Jacob Rabinow: "scanned comparison" reading machine (1982.0393).
- Robert B. Randels: child's orthopedic shoe and a photograph of Carl F. W. Schmidt who wore it, 1883 (1985.0677).
- Joseph G. Ranelli: barrel-shaped "Rochester Root Beer" soda dispenser, ca. 1940 (1984.0558).
- Henry Rau (through Marion L. Rau): 116 ceramics of mainly English Wedgwood manufacture (1981.0464).
- Mrs. Joseph J. Ray (through Daniel D. Ray): multitester stencil template with

- 6 paper tapes and a research notebook used by Joseph J. Ray (1985.0815). Einar H. Raysor: pair of wooden skis with bindings, pair of bamboo ski poles, pair of leather ski boots, wool ski hat, and 6 tubs of wax, all used between 1936 and 1944 (1985.0809).
- Bill Rechin: 4 posters using the cartoon characters from "CROCK" (1985.0265).
- Myrtle Reed: hand-embroidered quilt with the portrait, dates of office, and signature of each President of the United States from George Washington to Ronald Reagan, made by Myrtle Reed, Maudie Coffer, and Louise Witt, 1980s (1985.0338).
- Molka Reich: wood and canvas cat puppet used in Baba-Yaga plays in the 1930s (1985.0805).
- Janice H. and Peter R. Reilly: Roman Empire silver denarius of Marcus Aurelius, A.D. 161-180 (1984.0786).
- John Paul Remensnyder: 326 pieces of 18th- and 19th-century American stoneware (1977.0803).
- Remington Arms Company, Inc.: .35 mm caliber rifle stock (1980.0407).
- Kalman Renner: bronze medal honoring George Frederick Handel (1985.0755).
- Banco Central de la Republica Dominicana (through Manuel A. Bello Cabral and Miguel Estrella Gomez): uncirculated set of 5 coins from the Dominican Republic, 1983 (1984.0780).
- Charles V. Reynolds: 3 penny banks made of sandcast aluminum, "Reagan 81 (The Jelly Bean King)," "Campaign 84 (Reagan-Bush)(Mondale-Ferraro)," and "Reagan 85 (50th presidency)" (1985.0908).
- Rhode Island School of Design Faculty Association (through Kenneth Hunnibell): Rhode Island School of Design Faculty Association Award medal struck in 1984 by Merlin Szoesz (1985.0826).
- Lester W. Rice, Jr.: pair of woman's brown leather shoes, 1830-50; black hat with feather and rhinestone trim, 1885-95; fabric handkerchief case, 1900-20; and 2 beaded purses, 1900-25 (1984.0897).
- Eri Horner Richardson, Jr. and Phyllis H. Richardson: footed glass bowl and a frosted glass shoe, both produced for the U.S. Centennial, 1876, a ceramic display plaque, and a ceramic urn with cap, all made at Arequipa Sanatarium and designed by Eri H. Richardson, Sr., ca. 1923; and his book of designs and blueprints (1982.0806).
- Richmond, Fredericksburg & Potomac Railroad, Potomac Yard (through W. D. Morris): journal bearing for use on freight cars contained in original box, 1960s (1983.0792).
- Irving Richter: lithograph of Lewis Cass, Democratic candidate for the twelfth president of the United States, 1848 (1985.0004).
- Mary A. Ridgway and General Matthew B. Ridgway: uniform coat with insignia and decorations, trousers, and shirt, worn by General Ridgway when he sat for his official portrait as U.S. Army Chief of Staff (1985.0659).
- Barton B. Rinehart: 31 pressed pattern glass goblets of U.S. and Canadian manufacture originally collected by Dorothy Blake Rinehart (1985.0589).
- Bernard Ring: 2 U.S. covers and a United Nations cover, all commemorating stamps as education, November 19-21, 1971 (1984.0516).
- Mike Ringo: Auctori Plebis token, 1736 (1986.0570).
- S. Dillon Ripley: first day cover commemorating Project Tiger, postmarked New Dehli, India on November 22, 1983 (1984.0081).
- Roanoke Transportation Museum (through Stuart L. Sours): 5 cacheted covers with pictorial cancellations applied at the Roanoke Transportation Museum in conjunction with a celebration of the Roanoke Chapter of the National Railway Historical Society, 1979-83 (1984.0542).
- Joyce and Kenneth Robbins: 446 Indian fiscal stamps (1985.0822).

- Ann C. Robertson: 11 pieces of Grover Cleveland memorabilia (1986.0212).

 Edwin K. Robinson: pair of U.S. Navy identification "dog" tags with chain and a pair of tan canvas leggings, all ca. 1945 (1984.0301); 2-card set of hooks and eyes, 1900-9 (1985.0117); 5 cabinet prints, 2 tintypes, 2 portraits in cardboard cases, a carte de viste, and a school photograph (1985.0207); metal charge ticket from Frederick Loeser & Co. of Brooklyn, New York, ca. 1920 (1985.0756).
- William J. Robinson: 63 campaign buttons, a badge, and a pin for Walter Mondale and Geraldine Ferraro during the 1984 presidential campaign (1986.0449).
- Phillip Rochlin: 11 uniform items worn by Mr. Rochlin while in the U.S. Merchant Service, ca. 1945 (1984.0899); 3 cap covers, a blue uniform coat, and a set of buttons of the U.S. Merchant Service, ca. 1946 (1985.0149).
- Rock City Gardens, Inc. (through William H. Chapin): 2 bumper stickers, "See Rock City" and "Rock City," from the 1940s (1984.0451); birdhouse painted with advertisement "See Rock City," ca. 1960 (1984.0652).
- Jean Rodrigues in memory of Elfriede Bonello: 5-lati coin of Latvia dated 1931 (1985.0601).
- Fred M. Rogers: 4 videotape cassettes of the "Mister Rogers" program (1984.1037).
- Elizabeth H. Rollings: perforated paper embroidery of "The Lord's Prayer" in a wooden frame, embroidered in 1890 by Nancy Sawyer of Providence, Rhode Island (1985.0834).
- Jerry Rollins: 2 buttons marked "Falter Nondale for Pres.???" from the 1984 Republican National Convention (1985.0128).
- J. William Rosenthal, M.D.: 11 pairs of American-made glasses, late 20th century; 2 Grieshaber cutting instruments for eye surgery; and a container cover for Singleton's Eye Ointment (1984.0822); 3 intraocular lenses (1985.0419); set of 4 coins, set of sunglasses, 2 eye wash cups, an opthalmic poster by Chibret, microsurgical knife, Aspetorn contact lens cleaner with case, eel skin glass case, schematic eye, electric eye coutery, ointment jar with cover, lens trial box, binoculars, plastic surgical lens, and an implant holder (1985.0504); 10 eye wash cups and a Neu-Vita Oculizer eye massager, a quackery device (1986.0094); token labelled "Dr. N. B. Leidy, Blood Purifier 217 N. 6th Street, Philadelphia, PA" and "Dr. D. L. Flemming, 635 Vine Street, NE, Cor. 7th Street, Philadelphia" (1986.0455).
- Mary Rosner: fork imprinted "Troop K, 7th Cavalry" (1986.0227).
- Robert Rosner, M.D.: 2 retinoscopes used to measure focal planes of the eye (1984.0538).
- Marcel G. Ross: "Milwaukee" back brace worn by Peter Ross for treatment of scoliosis, 1978-79 (1985.0789).
- Mary Ross: cloak worn by George M. Cohan in his 1930 road show, The Tavern (1984.0941).
- Mr. and Mrs. Louis S. Rothschild: oil painting by Charles Lundgren of the N.S. Savannah, the first nuclear-powered merchant vessel, launched on July 21, 1959 (1985.0312).
- Mrs. Marie Rotter: 3 bronze and 1 silver sleigh bells brought to America from Finland, ca. 1911 (1981.0632).
- Rose F. Roucoules in memory of Alfred and Lucia Fages: 29 glover's tools and artifacts (314490).
- Louise S. Rousseaux: program with menu for the Inaugural Ball of President Theodore Roosevelt held on March 4, 1901 (1985.0241).

- Melba S. Royal: automobile license tag with number 25 issued by Schuylkill County, Pennsylvania, ca. 1904 (1984.0113); automobile license tag with number 1 issued by Schuylkill County, Pennsylvania to Robert Allison in 1903 (1984.0114).
- Royal Palm Polo-Sports Club Inc. (through Kenneth F. Gerard): Arena polo ball used for practice and a Royal Palm Polo-Sports Club Inc. program, 1983 (1984.0803); polo trophy for the "Sunshine League Championship, 1960-1981" (1985.0550).
- Marion Joyce Rubissow: W. & H. Hutchinson Lavenman or Domestic Clyster kit in box with all parts, late 19th century (1984.0466).
- Anna L. and Homer M. Ruley: 5 sets of Atchinson, Topeka, and Santa Fe Railway date nails (1985.0409).
- Margaret A. Ruppert (through Anita F. Mitchell): white uniform and skirt worn by Miss Ruppert while serving in the U.S. Navy Reserve Yeoman (F) during WW I (1985.0295).
- RUSH/berivon, inc. (through Beryl Rush Webb): 4 orthopedic pins, 1985, and a prototype orthopedic pin, 1948, for the fixation of bone fractures (1986.0125).
- David H. Russell: painted tintype of William Gaston Raynor, 19th-century relative of Mr. Russell, in its original frame (1986.0538).
- Helen Winnett Russell: 2 woman's gloves and a purse, 1948-52, and 2 woman's hats, 1950-59 (1982.0112).
- Wm. Rutledge: gray T-shirt stenciled with a red clenched fist by Mr. Rutledge when participating in a "sit-in" at Harvard University, winter of 1968-69 (1985.0363).
- City of Sacramento (through the Honorable Anne Rudin): 2 brochures, a bumper sticker, and a resume for the campaign of Anne Rudin for mayor of Sacramento, California (1986.0012).
- Lucile E. St. Hoyme: 4 Czechoslovakian postage stamps (1984.0511).
- St. Joseph Medical Center (through Michael Adler and Joseph Maio): portable anesthesia machine, ca. 1920 (1986.0641).
- St. Joseph School (through Michael P. O'Connor and Donna C. Vallee): 4 elementary school desks (1982.0717).
- St. Procop's Church (through James J. Vesely): catalog file cabinet with glass and paper slides, stereo viewer, and a teacher's desk and slide cabinet, all from St. Procop's Church in Cleveland, Ohio, ca. 1912 (1982.0716).
- Marvin Salo: Finnish-American birch bark basket and a pair of ski poles made by Mr. Salo in 1980 (1980.0747).
- Matt T. Salo: fortune telling sign, "Sister Marie/Reader & Advisor" (1985.0364).
- Bernard J. Sandler (through Peter H. Falk): 22 etchings of soldiers during WW I and a lithograph of a WW II scene, all by Lester G. Hornby (1984.0426).
- Robert C. Sardino: Western Electric microphone, ca. 1924 (1984.0613).
- SAS Philatelic Club: 5 first flight covers of the Scandanavian Airlines System (1983.0559); 8 first flight covers of the Scandanavian Airlines System (1984.0007); 14 first flight covers of the Scandanavian Airlines System (1985.0116); (through Niels Sommer): 90 first flight and commemorative covers of the Scandanavian Airlines System (1984.0895); 19 first flight covers of the Scandinavian Airlines System (1985.0674).
- Nicolas W. Sassow: 2 German military field compress bandages, a cotton strap tourniquet, and a Russian military field compress, all WW II (1986.0545).
- Joseph Sataloff, M.D.: Russian Byzantine-design ceramic vase made by the Francis Gardner Factory in Verbilki, Russia, ca. 1876 (1982.0802).
- Scandinavian Airlines System (through Delmar Wordh): 633 first flight covers

- (1984.0417).
- Ted Scarlet: Great Smoky Mountains National Park pennant, ca. 1945 (1985.0588). Raymond G. Schapley: German-Belgian double barrel 12 gauge shotgun, ca. 1870 (1984.0457).
- Dr. Arthur L. Schawlow: laser eraser (1985.0144).
- Mrs. Frances J. Scheele: pair of woman's high-top ice skates, 1925, and a brass finger ring, 1923-24 (1985.0168).
- David E. Schenkman: 17 U.S. tokens (1984.1051).
- Allan D. Scherer: polo uniform worn by Allan D. Scherer including a helmet, glove, shirt, pair of boots, jodhpurs, belt, knee pads, and a pair of stirrups (1985.0170).
- Mrs. C. B. Schmeltzer in memory of C. B. Schmeltzer: Webb adder, Keuffel & Esser planimeter in case with instruction pamphlet, set of drawing instruments in case, Gundlach microscope in case, cleaning rod, photograph of President Taft, set of 3 pencil sketches, and a copy of Spencerian Drawing Book No. 3 by H. Hitchings published in 1872 (317925).
- Floyd H. Schmick: pamphlet titled <u>Supplementary Rural Delivery Salary Tables</u> published by the U.S. Post Office Department in 1921 (1985.0350).
- June M. and Paul E. Schmid: set of 59 documents including letters, notes, envelopes, and application cards, 14 pamphlets, 4 books, a group of 4 newspaper articles, the booklet <u>One World</u>, and a copy of the magazine <u>Plain Talk</u>, all relating to Reverend Charles E. Coughlin, 1930s (1985.0049).
- Fred W. and Marie S. Schmidt: 2 sets of collar insignia and a WW I Victory medal which belonged to Barbara Ziegler who joined the Army Nurse Corps in 1901 (1986.0276).
- Harry Schneider: Underwood Sundstrand adding machine (1985.0655).
- D. Scott: 2-piece corn broom-making machine (314498).
- Mrs. Donald C. Scott (through Juliet Bartoletti): Spanish knapsack, blue infantry aiguillette, American Bible Society New Testament, 1897, and a pass from the 10th Infantry Headquarters dated 1899, all collected in the Philippines during the Spanish-American War (1984.0435).
- Seafarers International Union (through Charles A. Svenson and Dorothy Wicker-Re): 50 miscellaneous items from the Seafarers International Union including stationery, caps, documentary material, stickers, photographs, pins, buttons, and a pen (1986.0448).
- Irving N. Segal: Arithma stylus-operated adding machine with case, made by Addiator in the early 20th century (1986.0543).
- Colonel Donald A. Seibert: 8 political buttons and a badge stating "Let's Stay Out" (1986.0204); 37 pin-back buttons of sports, religious, educational, and entertainment subjects (1986.0210).
- Ross Sellers: 10 pieces of equipment and tools from the I. Bedichimer & Company Masonic Jewelry Shop in Philadelphia and 3 Masonic pin decorations produced by the shop (1986.0354).
- Sid Semsey: set of 4 National Prohibition Act prescription blanks for whiskey, ca. 1925 (1985.0766).
- Service Employees International Union (through John J. Sweeney): 29 pieces of documentation, posters, newspapers, and buttons and a videotape cassette produced by the Service Employees International Union for the Mondale presidential campaign, 1984 (1985.0176).
- Barry S. Shanoff: 2-piece tickertape from AP/UPI teletype machines of the report of the assasination of President Kennedy on November 22, 1963 (1984.1097).
- Warren G. Sharples: White Cross electric vibrator, 20th century (1985.0146).

- David H. Shayt: stove-polishing paste in a wooden box patented in 1871 and made by the American Chemical Manufacturing Company of Rochester, New York (1985.0963); in honor of Elizabeth Summerville Aspinwall: deco style watch (1984.0553).
- Petrena Abbe Shea: 44-star U.S. national flag, 1891-96 (1984.0797).
- Robert E. Sheldon: household postal scale made by the Kingsbury Manufacturing Company of Keene, New Hampshire (1985.0695).
- Randall M. Shelton: Vermont copper coin dated 1786 (1986.0530).
- Shiley Incorporated (through Barbara Frey): 4 Bjork-Shiley cardiac valve prostheses (1985.0439).
- Wesley E. Shook: 2 American propaganda pamphlets from WW II (1985.0423).
- Howard J. Short, Sr.: uncancelled cacheted envelope commemorating National Air Mail Week observances at Willow Grove, Pennsylvania on May 15-21, 1938 (1984.0701).
- Shugart Associates (through J. S. Campbell): minifloppy disk drive with 9 engineering drawings and diagrams (1982.0385).
- H. W. Simmons: 3 cards for making automatic telephone calls in Belgium and England and an English token for promoting traditional ales (1984.0766).
- George W. Sims: 48 artifacts of religious and utilitarian use from various nations, 20th century (1981.0726); 6 cloth chevrons, 4 buttons and a bronze button set; 2 collar insignia; 2 medals; a hat cord; belt plate; web belt; fired projectile; and a Panama Canal Zone identification tag (1984.1091).
- Lydia Foster Sinclaire: candlestick with green overlay on stem and engraved grapes and leaves and a sherry glass and an iced tea glass engraved with a floral motif, all of colored glass and made by H. P. Sinclaire & Company of Corning, New York, 1920s (1985.0082).
- Vijai Pal Singh: 677 Indian fiscal stamps, 1870-1947 (1986.0120).
- Robert N. and Sara Singleton: peace banner segment reading "Let There Be Peace on Earth and Let It Begin With Me" from the August 4, 1985 rally (1985.0945).
- Shellyne M. Sippo: 2 phonograph records titled "Mr. Reagan (Won't You Give Me A Job?)" produced by Michael and Shellyne Sippo, 1983 (1984.0808).
- J. B. Skelton, M.D.: 2 Dalkon Shield intrauterine devices, one new and one used (1985.0892).
- B. F. Skinner: programmed teaching machine with 4 sets of disks and sheets and 2 sets of sheets (318945); pre-computer teaching machine designed to teach arithmetic and spelling to grade school students, made by IBM (1984.1069).
- Thomas H. Slack: Squadron Bulletin from the U.S. Flagship New York, off Santiago de Cuba, July 3, 1898 (1986.0259).
- Ruell A. Sloan in memory of Dr. Margaret H. and Dr. Ruell A. Sloan: 13 medical apparatus, surgical instruments, and microscope slides, 4 light bulbs, 2 mouth pieces, and a battery (1984.1044).
- Memorial Sloan Kettering Cancer Center (through John S. Laughlin, Ph.D. and Roger A. Parker): Betatron unit (1984.0642).
- Walter H. Smartt, M.D.: 3 watt-hour meters (1984.0919).
- Elizabeth D. Smith: tally sheet for the "1972 Nixon Campaign Volunteer Walking List" (1986.0313).
- Gary W. Smith: enlisted man's identification badge for use in the Office of the Chief of Staff, 1985 (1985.0537).
- Harriet K. Smith: woman's muff and scarf worn by the donor's grandmother, Mary

- E. Foy, 1895-1905 (1985.0732).
- Oscar W. Smith, Jr. in honor of Oscar W. Smith, Sr.: phonograph record titled "The Political Minstrel" recorded by Joe Glaser for the Democratic Party during the 1956 presidential campaign (1984.0883).
- Paul N. Smith: 35 pieces of insignia worn by Mr. Smith while a member of the R.O.T.C. of Appalachian State University, 1978-82 (1982.0374).
- Rachel M. Smith: 6 dinner plates from the Steubenville Pottery and a martini pitcher with 6 goblets, water pitcher with stopper, 2 dessert plates, 2 salad plates, 2 goblets, and 2 candle holders from the Cambridge Glass Company (1984.0867).
- Stanley H. Smith: 2 clothing bags, 2 magazine pouches, a pair of black rubber sandals, telephone receiver, rifle cleaning kit, pistol ramrod, and a poster, all issued by the U.S. Army, North Vietnam, or the Viet Cong, ca. 1968 (1984.0296).
- Verna E. Smith: doll made of rope by sailor Gilman L. Smith during WW I (1984.0635); savings account bankbook for account opened October 4, 1929 at the Kennebunk Bank of Kennebunk, Maine (1984.0741).
- Arthur Smukler: 2 signs of "Chaplin" and "Rough Riden Rabbi" used by Rabbi Capt. Harry Z. Schreiner on his jeep in Korea, 1950, and a container of mints labeled "Male Contraceptive Pills" from the television show "The Life and Times of Eddie Roberts or L.A.T.E.R." (1985.0353).
- Carol A. and Richard A. Sobel: 17 pieces of uniform clothing worn by Mr. and Mrs. Sobel during their military careers, 1974-84 (1985.0098).
- The Society of Medalists (through Joseph Veach Noble): U.S. medal "Bursting the Bounds" by Donald Delue, August 1985 (1986.0157); U.S. medal "Escape and Capture" by Richard M. Miller, 112th issue of The Society of Medalists, 1985 (1986.0491).
- Software Country (through Les Crane): 2 computer software programs titled "I Ching, The Book of Change" and "Software Golden Oldies Volume I" (1985.0816).
- Janet W. Solinger: woman's 3-piece St. John suit, 2-piece Anne Klein suit, 3-piece Robert Janan dress, a white blouse, and a plaid handkerchief, 1977-81 (1986.0046).
- Mary Nicholas O. Sommerfeldt: 2 framed photographic portraits of Giuseppe and Mary Pasculli, ca. 1915 (1984.0907).
- John T. Sorbie: 4 posters from the Perkins Shearer/Denver Symphony Annual Polo Cup, 1982-85 (1985.0813).
- Ernest M. Sorrell: prototype of a device for propping up a baby bottle designed by Mrs. A. B. Sorrell, 1984 (1985.0102).
- University of South Carolina at Aiken (through Frankie H. Cubbedge): 5 leaflets, 4 programs, 4 posters, 2 bumper stickers, 2 buttons, and a bookmark from the Women's History Week Project held at the University of South Carolina at Aiken, March 7-13, 1982 (1986.0005).
- University of South Florida, Medical Center, College of Medicine, Department of Pediatrics (through John S. Curran, M.D.) and Tampa General Hospital (through Charlie F. Scott): Pragel carrier for transporting infants to the hospital, ca. 1939 (1984.1028).
- South of the Border, Inc. (through Ray Schafer): souvenir sombrero ashtray and charm bracelet from South of the Border, Inc., 1950s (1985.0586).
- South Walpole State Prison: 2 first day covers commemorating penal philately (1984.0515).
- Government of Spain, Army Museum of Madrid (through Agustin Caro): 3 replicas of Spanish regimental flags carried in Florida during the Revolutionary War (1981.0856).

- Lydia P. Speir: 2 girl's hats, 1935-40 (1985.0691).
- William F. Spengler: 69 Indian coins (1985.0505); 83 coins from various Indian states and Delhi Sultans (1985.0683); 6 ancient Indian "bent-bar" Satamana coins (1986.0645).
- Philip D. Spiess: tile panel made by Rookwood Pottery of Cincinnati, Ohio, 1904-15 (1981.1028).
- Allan J. Spilner: 15 phonorecords (1985.0561).
- Sports Illustrated (through Jane Gilchrist): 1980 U.S. Olympic Hockey Team artifacts including a pair of gloves, leg warmers, pair of skates, pants, helmet, jersey, and a poster (1984.0940).
- Phil Spottswood: camera lucida engraved "Alex Alexander Optician to the Queen Exeter" and wooden case (1985.0434).
- Ellen V. Sprouls: 2 leaflets, 2 brochures, 2 stickers, a plastic bag, newsletter, and a brochure, all relating to equal rights and abortion rights issues (1985.0524); 3 handouts titled "Nuclear Arsenal Project," "They Did It Before They'll Do It Again Prevent World War III--No Matter What It Takes," and "Dates and Locations of Exhibition Amber Waves of Grain," 2 brochures titled "Our March Towards Nuclear War...Can be Stopped" and "Women's Action for Nuclear Disarmament Let's Wrap Up This Arms Race," a bumper sticker, "Freeze Nuclear Weapons," and a postcard "Amber Waves of Grain August 4-16 On The National Mall Washington, D.C." (1986.0051).
- Hazel C. Squires: theatre program titled "New York Hippodrome Souvenir Book" for the 1906-7 season (1986.0103).
- Benjamin Stack: 10 Roman Imperial bronze coins (1984.0859); 24 Roman bronze coins (1984.0963).
- Estate of Benjamin Stack (through Harvey G. Stack): 25 Roman Imperial sestertii (1984.0995).
- Benjamin, Harvey G., and Norman Stack: 68 original drawings by Victor D.

 Brenner for medals, trademarks, bookplates, and border designs
 (1979.1200); 88 counterfeit dies of Roman Imperial, Byzantine, and Vandal coins (1984.0925).
- Harvey G. Stack: 13 ancient Greek gold and silver coins (1984.0857); 10 Roman and Greek coins (1984.0910); 51 ancient Greek silver coins (1984.0990); Queen Victoria proof sovereign, 1857 (1984.1109); 4 dies and a die ring used to strike commemorative medals (1985.0827).
- Harvey G. and Norman Stack: 3 pieces of funeral money; a souvenir badge, 1898; U.S. trick coin; membership token; Lyceum Theatre storecard; and a fare token (1985.0123); 13 Indian coin dies (1985.0486); 10 Egyptian lead tokens and 2 Kushan silver coins (1985.0487); 11 Indian coin dies (1985.0488); 50 French and medieval coins, 13 Sasanian coins, 5 Persian clay tokens, and 4 French Indian coins (1985.0489); 95 Persian sigloi coins of the 4th century (1985.0490); 11 Indian coin dies and 6 Belgian medal dies and hubs, 17th through 20th centuries (1985.0492); 6 British documents with signatures of Kings George I, II, III, IV, V, and VI (1986.0185); silver Battle of Vera Cruz award medal designed by Charles Cushing Wright between 1847 and 1854 (1986.0583).
- Norman Stack: 8 Roman Imperial bronze coins and 7 ancient Greek silver coins (1984.0850); 10 ancient Roman and Greek silver and bronze coins (1984.0909); 52 ancient Greek silver coins (1984.0992); 2 dies used to strike a medal commemorating Colonel John Armstrong, ca. 1874, and 2 dies used to strike a medal commemorating Benjamin Franklin, 1920 (1985.0828).
- James W. Stancil: Underwood Champion portable typewriter, war correspondent model with a built-in telescoping tripod stand and case (1985.0954).

- Dr. Frank Stanton: Columbia 360 phonograph (1986.0196).
- Albert Starr, M.D.: prosthetic mitral valve first used in a human heart in September 1960 (1984.0704).
- Christopher K. Steele and Rosemary Steele: 12 ceramic pieces produced by the "RAM Process" developed by Richard Steele and A. R. Blackbirn in 1943 and 2 pieces of studio pottery by Richard Steele (1983.0751).
- Sam D. Steinhart: collection of 617 buttons containing protest buttons, protest labor buttons, anti-Vietnam War buttons, and Spanish Civil War buttons (1985.0106).
- Barbara D. Stewart: blue plastic kazoo marked "Keep America Humming," 1984 (1985.0681).
- Leslie J. and Marie M. Stewart: 53 artifacts used by cowboys in the Paradise Valley, Nevada, 20th century (1981.0086).
- Dennis Stillings: Albert Abrams oscilloclast with 9 accessories, attachments, and cover, patented February 20, 1923 (1982.0087).
- Marion B. Stokes: phonorecord album titled "The Missing Linc" (1984.1116).
- Robert G. Stone: 277 postally used foreign stamps (1984.0927).
- Madeline B. Storm: scrapbook and journal combination with 2 Convoy booklets kept by Cecil E. Storm while serving in the U.S. Naval Reserve aboard the USS St. Louis during WW I (1984.0809).
- Robert L. Strong: yellow silk twill dress with cream-colored lace, made for a woman and later altered to fit a girl, 1840s (1986.0166).
- Julie Anne and Sharon Lynn Stumpf: set of 5 award ribbons, set of 4 medals, 3 T-shirts, a racing swim suit and cap, and a hooded sweat jacket (1985.0622).
- Henry Sugimoto: 3 oil paintings by Mr. Sugimoto of life at Camp Jerome, Arkansas, an internment camp for Japanese-Americans during WW II (1984.1118).
- Donald H. Sultner (through Haldeman S. Wertz): Hasselbad camera with 7 accessories, Rolleiflex camera with Xenar lens and original box with 3 accessories, Rolleiflex camera with Planar lens and original box with 2 accessories, 2 lens papers, 2 sets of film, a projector lamp, light meter, spot meter attachment, tape splicer, lens brush, and a cable release (1983.0005).
- Loretta Dewey Suman: hand cultivator with 2 attachments made by the Lerop Plow Company of Leroy, New York (1984.0844).
- Ruth M. Suppes: black and white photograph of Mrs. Grover Cleveland when she was a young lady (1985.0455).
- Estate of Genevieve Woodard Swanson (through Ann H. Forward and Jane Jeffers): hexagonal wooden medicine chest covered with hand-tooled brass containing 27 hand-blown glass bottles and 8 wooden drawers, 17th century (1985.0202).
- Francis L. Sward: 10 manuscript dyer's record books dating between 1844 and 1880 owned by John Oldfield, former assistant manager of Garner Print Works in Garnersville, New York (1984.0486).
- Government of Sweden, The Swedish Post Office, Stamps and Philatelic Service: 259 mint stamps and booklets, 41 first day covers, 12 maximum cards, 11 post cards, and 5 souvenir sheets of Sweden (1983.0522); 464 stamps, 24 covers, and 20 maximum cards of Sweden (1984.0050); Postens Frimarksavdelning (through Sirkka Lehtinen): 134 mint stamps, 18 first day covers, 14 maximum cards, and 5 souvenir sheets of Sweden (1984.0627); 440 mint stamps, 48 first day covers, and 44 maximum cards of Sweden (1985.0114).
- Avron Y. Sweet, M.D.: infant's continuous positive airway pressure (CPAP).

- system, 1970s (1984.0528).
- Synertek, Inc. (through Robert Dickey): SY6502-8 bit microprocessor (1984.0154).
- Syracuse University, S. I. Newhouse School of Public Communications, Office of the Dean (through Judith Hickmott): measuring microscope in case with one objective used by Frederick Goudy to measure matrices (1984.1016).
- Merlin Szoesz: F.I.D.E.M. medal commemorating the U.S. delegation to the 1985 Congress, Stockholm, designed by Merlin Szoesz (1985.0720); U.S. Commemorative Tricentennial Medal of Albany, New York, 1686-1986 (1986.0631).
- Robert Tamarantz: Indian trade token from Bylas, Arizona (1985.0025). Joseph Tamele: pocket watch with movement and dial marked "Henry
- Joseph Tamele: pocket watch with movement and dial marked "Henry Fraiberg/Cleveland, O." (1984.0915).
- James P. Tanner: fishing reel patented March 14, 1905 by Frank Fullilove of Owenton, Kentucky and a medal awarded for the reel at the Louisiana Purchase Exposition of 1904 (1985.0508).
- Ernest H. Taylor: Japanese duplicating mold for printing type (1983.0840).
- Henry Taylor: set of 12 railroad keys, 7 jacket buttons with L&N logo on top of button, L&H porter uniform hat, and a railroad lantern (1985.0552).
- Dr. Gordon K. Teal: 2 silicon and a germanium man-made crystals which led to the development of integrated circuits (1984.0126).
- Technicon Instruments Corporation, Diagnostic Systems Division (through F. R. Stubbins III and John Whitehead): first working system of the Technicon Autoanalyzer for analyzing blood tests and its prototype developed in 1953 by Leonard T. Skeggs, Ph.D. (1984.0608).
- Estate of Carmela Tedeschi (through Dina T. Fleming): man's 3-piece suit, 1950-70; woman's 2-piece dress, 1900-5; and a woman's petticoat, 1950-55 (1983.0829).
- Temple University, School of Communications and Theater, Department of Radio-Television-Film (through Francis L. Heying): 23 audio discs of radio transcriptions of programs and interviews with various entertainment and sports personalities, 1930-50 (1985.0302).
- Theradyne Corporation (through Jack H. Casper): 13-piece, 3-wheeled "Titiann" wheelchair made of titanium by Theradyne Corporation, 1983 (1984.0674).
- Albert E. Thill, M.D.: 3 political tokens from Orange County, California (1985.0422).
- Miriam Streator Thorward: 2 boy's straw hats, 1890-1900 (1984.1087).
- Marilee Tillstrom: woman's fan advertising "Putnam Fadeless Dyes-Tints,"
 1930-45; and an off-white dickey, 1940-60 (1986.0045); 3-piece curling
 iron with its original box and instructions made by the Edison Electric
 Appliance Company of Chicago, 1906; a box of mascara made by Avon
 Products, Inc. of New York, 1943; and a plastic shopping bag, 1980-86
 (1986.0321).
- Toshiba America, Inc., Information Systems Division (through Richard Lockman):
 Toshiba printer with 10 pieces of associated documentation (1985.0435).
- Tracor Instruments, Tracor, Inc. (through R. E. Oliphint): Tracor Model 304D Rubidium-87 Vapor Absorption Frequency Standard with clock movement, a spare vapor absorption cell, and a spare rubidium lamp (1981.0076).
- Sebastian J. Tralango: 6 drawing instruments in a box, 2 curves, set of rules, slide rule, beam compass set, and a planimeter (1984.1071).
- Nicole and Tracey Trapp (through Darrell Trapp): shovel handle used in the ski-tow at Whitney's in Jackson, New Hampshire, ca. 1936 (1985.0814).
- Jay Tredwell: menu card for the "Inaugural Luncheon 1981" (1985.0243).
- Judith A. Trenholme: peace banner segment from August 4, 1985 rally marked

- "Anna Karenina, Bambi, Fanshen Fear, Flying Heidi, A Tale of Two Cities, Uncle Tom's Cabin" (1985.0947).
- Trenton State College, Department of Physics (through Wade Curry and Judson J. Fink): 2 Leyden jars, 2 electrometers, an Edison phonograph, magneto, telegraph receiver, pneumatic syringe, lift pump, weight of air globe, Daniell-type hygrometer, hygrodeik hygrometer, manometer, and a tangent galvanometer (1982.0230).
- Marian Lady Tyger Trimiar: pair of boxing gloves and a piece of a terry boxing robe with the name "Lady Tyger," both worn by the female boxer Marian Lady Tyger Trimiar (1985.0052).
- Robert A. Truax: 3 postal notes dated 1883-90; 2 postal cards and a mourning card cancelled on a Philadelphia streetcar RPO; 2 advice of postal money orders, 1899; postal card with agent marking for J. E. Baird, 1881; and a post card showing the McAllister Streetcar Mail Box of Wilmington, Delaware (1985.0370).
- TSR Inc. (through Kevin B. Blume): engine and boiler from the sidewheel paddle steamer <u>Lucius Newberry</u> built in 1875, which sank in Lake Geneva, Wisconsin on December 9, 1891 and was salvaged in 1981 (1984.0504).
- John B. Tullner in honor of his children Cathy, John, Jr., and Jimmy Tullner: 2 trophy baseballs marked "'Mar 30, 1899'/Georgetown University vs Yale" and "'Apr 2, 1909'/Georgetown vs. Penn State," respectively (1985.0401).
- Government of the Turkish Federated State of Cyprus, Directorate of Postal Department: 2 stamps and a first day cover of Turkish Cyprus (1983.0286); 9 mint stamps, 4 first day covers, and a souvenir sheet of Turkish Cyprus (1983.0440).
- Government of the Turkish Republic of Northern Cyprus, Ministry of Communications and Works, Postal Department, Philatelic Bureau: 7 stamps and 4 commemorative covers of the Turkish Republic of Northern Cyprus (1984.0011); 11 mint stamps and 8 covers of the Turkish Republic of Northern Cyprus (1984.0753).
- Dr. Stephen R. Turner: Zenith television receiver (1984.0875).
- Hilde Uhlman: 39 mint and used postage stamps of Turkey (1986.0398).
- Lt.(jg.) W. A. Ullmann: "Operation Urgent Fury" patch worn by participants in the U.S. invasion of Grenada in October 1983 (1985.0233).
- Union of Concerned Scientists (through Lynda Dreyfuss): 2 television commercials on videotape cassettes, "Haircut" and "Twinkle, Twinkle" (1986.0365).
- Government of the United Arab Emirates, Ministry of Communications, General Postal Administration, Philatelic Bureau: 4 mint stamps of the United Arab Emirates (1983.0833); 10 mint stamps of the United Arab Emirates (1985.0024).
- United Association of Office, Sales, and Technical Employees (through Charles D. Huggins): sheet of letterhead and tie tack, both with the United Association of Office, Sales, and Technical Employees' logo (1986.0332).
- United Automobile Workers of America (through Peter G. Laarman): 3 videotape cassettes relating to the United Automobile Workers' 50th Anniversary (1986.0139).
- United Electrical, Radio and Machine Workers of America (through Amy R. Newell): 2 buttons, 2 sheets of stationery, and a lapel pin for the United Electrical, Radio and Machine Workers of America (1986.0349).
- The United Food & Commercial Workers International Union, AFL-CIO & CLC (through Lewie G. Anderson): 2 notebooks titled "Meat Packing Industry Fact Book" and "Fact Book on Local P-9/Hormel," 1985 (1986.0366); (through Frank Van Veelen): 6 shop cards, 6 stickers, 3 videotape

- cassettes, 2 press kits, a lapel pin, sheet of letterhead, and an envelope, all relating to The United Food & Commercial Workers, International Union (1986.0113).
- United Mine Workers of America (through Richard L. Trumka): 6 stickers, 4 bumper stickers, 3 buttons, 2 badges, 2 sheets of stationery, a tie tack, decal, and a legislative guide and pocket calendar, all relating to the United Mine Workers of America (1986.0340).
- United Nations Postal Administration: 8 miniature sheets of the United Nations flag series issued September 26, 1983 (1983.0557); 564 mint stamps and 6 miniature sheets of the United Nations (1984.0006); 594 mint stamps and 8 souvenir sheets of the United Nations (1984.0694); 756 mint stamps, 15 postal cards, and 5 stamped envelopes of the United Nations (1985.0211); 648 mint stamps and 8 souvenir sheets of the United Nations (1985.0563).
- U.S. American Revolution Bicentennial Administration: silver plaquette and a pewter plaquette from the Franklin Mint's "Bicentennial History of the United States Ingot Series" (1984.0767).
- U.S. Department of Agriculture, Agricultural Research Service, Western Region, Bee Research Laboratory (through L. N. Standifer): moveable-frame beehive made by L. Gasca in 1976 from patent specifications of Rev. L. L. Langstroth of Philadelphia, patented October 5, 1852 (1977.0760); Forest Service (through Alfred E. Beaty and James R. Doyden): 12 forestry and fire fighting tools, 5 flags, 4 pieces of "Smokejumper's" clothing, 2 parachutes, 2 bedrolls, and a first aid kit (320022); Meat and Inspection Division (through Dr. M. A. Simmons): 55 wax and plaster models used to train U.S. Department of Agriculture Meat Inspectors in the identification of animal diseases (1982.0801); Soil Conservation Service (through William A. Centopani): soil color set with 32 vials, 1923, and 2 vials of powdered and granulated minerals containing 64 minor elements (1985.0590).
- U.S. Department of Commerce, National Bureau of Standards: 12 components of the Standards Eastern Automatic Computer developed ca. 1951 (1980.0305); Division of Metallurgy (through Lawrence H. Bennett): electro-magnet by Varian Associates, a probe, chamber for a mouse, and a cable, all used in the first successful in vivo demonstration of magnetic resonance imaging, performed on a live mouse in 1972 (1986.0014).
- U.S. Department of Defense, Defense Property Disposal Office: Atlantic Escape and Evasion kit and a Southeast Asia Escape and Evasion kit (1980.0231); Department of the Air Force, Air Force Weapons Laboratory (through Jerry Ray Bettis): 2 plastic strips and a missile nose cone (1985.0293); Headquarters AFMPC/MPCASA (through Stanley M. Duda): 5 pistols, 3 knives, 2 walking cane-quns, 2 rifles, and a double-barreled shotgun (1985.0284); Office of Public Affairs, Community Relations Division, Special Events Branch (through Lt. Col. Joseph S. Panvini): 17 U.S. Air Force campaign streamers used on flagstaffs indicating Vietnam service, 1961-72 (1984.0948); Department of the Army, ARDC Support Activity: British Hotchkiss portable machine gun and a light machine gun of U.S. manufacture (1986.0171); The Chief of Military History and the Center of Military History: enlisted man's wool service coat, 1918, and 2 flags of the Republic of Vietnam (1977.0704); Center of Military History, 1st Cavalry Division Museum (through Rudeford M. Norman): British MK-1 anti-tank gun (1984.0922); case of horseshoes, 1903; pair of woman's gray plastic overshoes; pair of low quarter black shoes; set of 5 shelter half pins; binocular case; and a Communion set (1985.0100); Fort Benjamin Harrison Museum: 2 cotton duck bags, 2 fuze setters, a can of anti-fog,

can of foot powder, poster of decorations and awards, plastic canteen. sectionalized projectile, practice projectile, and an aircraft smoke, signal, and illumination device (1979.0329); Fort Huachuca Museum: 1st Signal Service Group guidon, British WW I field telephone, and a Japanese field telephone, 1932 (1986.0307); Fort Sam Houston Museum (through John M. Manquso): 3 pairs of black low quarter dress shoes, 1940s and 1960s (1984.0881); Headquarters, U.S. Army Armament, Munitions and Chemical Command (through Joseph P. Casadei): French machine gun and receiver (1986.0040); The Infantry Center and School (through Capt. Jeffrey G. Miller): 6 insignia, 2 scarves, 2 decals, and 2 helmet liners, all used at the Officer's Candidate School at Fort Benning, Georgia (1983.0700); The Institute of Heraldry (through Col. Charles R. Spittler): flag of Great Britian, flag of Vietnam, and a flag of the Congo (1982.0022); (through Opal V. Landrum): 53 pieces of distinctive insignia (1986.0457); The Old Guard Museum: 19 firearms and edged weapons (1986.0052); Oregon Military Museum: M14 rifle, grenade launcher, and a submachine gun (1986.0053); Don F. Pratt Museum (through Charles H. Cureton): 3 reproductions of an English musket, 3 rifles, 2 machine guns, a rifle/shotqun, carbine, and a revolver (1985.0145); 2nd Armored Division Museum (through Tambia Little Johnson): 6 British helmets, 1940s, and 2 guidons (1984.1053); 7th Infantry Division and Fort Ord Museum: 16 medal lapel pins; pair of mittens, WW II; pair of combat boots, 1960s; and a sharpshooter qualification badge (1984.0939); 3rd U.S. Infantry and Central Issue Facility (through Colonel Cini): 13-piece dress blue uniform of Colonel Robert G. Krause, Commander of the *Old Guard, * 3rd Infantry, 1985 (1985.0165); 203rd Military Intelligence Battalion: carbine and machine qun of Soviet manufacture (1986.0247); U.S. Army Quartermaster Museum (through Phil Cavanaugh): 3 individual and one pair of red wool U.S. Army experimental shoulder loops and a loop of navy blue wool, 1936-38 (1984.0791); U.S. Army Training Support Center (through Col. Robert E. Spurrier): 42 pieces of insignia and a beret used by mock Soviet Forces during training exercises (1984.0839); U.S. Civil Administration of the Ryukyu Islands (through Lt. Col. D. C. Buckley): 136 mint postage stamps of the Government of the Ryukyu Islands, 1970-71 (1984.0896); U.S. Military Academy Band (through Emma-Jo L. Davis): 7-piece band uniform worn by Sergeant Major Robert Moon, 1974-84 (1985.0510); Department of the Navy, Naval Administrative Command (through R. E. Pastore): R.C.A. electron microscope, utlra microtome, and an intermediate power source (299455); Naval Air Development Center: 20 components related to cathode ray tube display technology and the early applications to aircraft systems, radar, and computers (1978.0261); Office of the Secretary of the Navy: Brazilian Rossi Squire shotgun (1985.0836); U.S. Marine Corps, Marine Corps Development and Education Command (through Capt. C. W. Smith): M16 rifle prototype with accessories (1986.0536); Deputy Assistant Secretary of Defense (through Stanley M. Duda): automatic pistol with case and accessories made in Austria by Glock (1985.0405).

- U.S. Department of Energy, Idaho Operations Office (through Nick C. Aquilina): sheet of 16 gasoline rationing coupons printed during the Arab oil embargo of 1973 (1984.0966); Oak Ridge Operations (through Joseph A. Lenhard): model demonstrating the diffusion separation of isotopes built at Columbia University in 1942 as part of the Manhattan Project (1984.0855).
- U.S. Department of Health and Human Services, National Institutes of Health,

- National Heart, Lung and Blood Institute, Division of Heart and Vascular Diseases, Devices and Technology Branch (through Frank Altieri, Ph.D. and Stephen F. Nemerson): 3 Intra-aortic balloon mandrels, 2 energy converters, Statham left ventricular bypass pump computer console, Lowell Harmison total artificial heart, 1971-2, rectangular plastic test model heart, DeBakey pump with Dacron vascular graft filter, totally implantable functional mock-up artificial heart, totally implantable pump used in a cow in 1969, and a pneumatically driven bypass pump devised by Cooley in 1975 (1985.0329).
- U.S. Department of the Interior, Fish and Wildlife Service (through Peter A. Anastasi): die proof and a pane of 30 1984-85 Migratory Bird Hunting and Conservation federal revenue stamps (1984.0754); pane of 30 stamps and the die proof for the 1985-86 season of Migratory Bird Hunting and Conservation federal revenue stamps (1985.0758); (through Bob Hines): 90 Migratory Bird Hunting and Conservation federal revenue stamps with 3 die proofs for the 1969-72 seasons (1985.0391).
- U.S. Department of Justice, Drug Enforcement Administration (through Steven Zimmerman): 3 U.S. ten dollar gold pieces dated 1795, 1797, and 1803 (1984.1125); (through Sherlean P. Route): Smith & Wesson semiautomatic pistol with 2 extra magazines (1985.0224); Smith & Wesson pistol (1986.0056).
- U.S. Department of State, Diplomatic Reception Rooms (through Clement E. Conger): carved wooden cigar store figure of an Indian "princess" by John L. Cromwell of Williamsburg, New York, ca. 1874 (1982.0251); Office of the Chief of Protocol: Brazilian Rossi revolver (1985.0839); (through Ulysses Faulkner): Belgian automatic pistol with cleaning rod and extra magazine, made with Browning's patent by Fabrique Nationale (1985.0579).
- U.S. Department of Transportation, U.S. Coast Guard, Headquarters (through Admiral J. S. Gracey): 3 sets of battle streamers for a Coast Guard flag (1985.0513).
- U.S. Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms: Colt single-action army revolver (1983.0499); 5 rifles and a pistol (1985.0838); (through Sherlean P. Route): Ruger "Speed Six" revolver (1985.0578); Beretta semiautomatic pistol with magazine and silencer, Beretta semiautomatic rifle, and a Ruger revolver (1985.0769); Smith & Wesson pistol and a Browning high-powered pistol (1985.0837); Colt's Lawman revolver and a Ruger rifle (1986.0322); Bureau of Engraving and Printing (through Robert J. Leuver): 322 certified plate proof sheets (1984.0418); 300 certified plate proofs for U.S. postal issues (1984.0756); 129 certified plate proof impression sheets (1986.0571); U.S. Mint (through Director of the Mint): 2,237 coins and medals from the U.S. Mint transferred to the National Numismatic Collection prior to 1923 (1985.0441); (through Donna Pope): 10 coins comprising 2 U.S. 1984 proof sets (1984.0609); 104 gold, silver, and bronze medals and 10 coins produced by the U.S. Mint and a wooden box used to transfer gold bars to and from Fort Knox (1984.0649); 10 bronze Presidential medals (1984.0989); 34 U.S. coins including 2 U.S. uncirculated sets of 12 each, 1984, and 2 U.S. proof sets of 5 each, 1985 (1985.0122); 3 1984 Olympic qold coins, 3 bronze medals from the National Historical Series, and 2 1984 American Arts gold medallions (1985.0274); 2 U.S. uncirculated coin sets with "D" and "P" mint marks dated 1985 (1986.0036); 6 United States Statue of Liberty commemorative coins, 1986 (1986.0495); 2 U.S. proof coin sets dated 1986-S (1986.0505); Office of the Comptroller of the Currency, Administrator of National Banks (through Jerry Fisher): letter

- from the Speaker of the House of Representatives Champ Clark to J. B. Harvey, Secretary of the Democratic Central Committee, May 8, 1912 (1985.0907); U.S. Customs Service: Charter Arms Company undercover model revolver (1985.0352); (through Sherlean P. Route): Charter Arms Corporation revolver with leather holster (1986.0055); District Director of Customs: Lefever Arms Company double barrel 16-guage shotgun and an Iver Johnson caliber .22 magnum revolver (1982.0724).
- U.S. General Services Administration (through Victor A. Taylor): 10-dollar gold coin minted in Philadelphia, Pennsylvania in 1894 (1985.0780).
- U.S. Judicial Branch, Supreme Court of the United States, Office of the Curator (through Gail Galloway): 18 press releases and documents concerning the appointment of Sandra Day O'Connor as an Associate Justice of the Supreme Court, September 1981 (1983.0845).
- U.S. Legislative Branch, Congress of the United States, Joint Congressional Committee on Inaugural Ceremonies (through Charles McC. Mathias, Jr.): group of 10 tickets admitting seating to various parts of the Capitol during the Inauguration Ceremonies, 1985, menu and program for the Inaugural Luncheon held in the Statuary Hall on January 21, 1985, and an Inauguration Ceremonies platform map (1985.0420); Library of Congress, Exchange and Gift Division: yellow ticket for reserved section, used for the March on Washington, 1963 (1985.0916); 4 badges, 3 buttons, "Coolidge Again", 2 ribbons, "Give to Alfred E. Smith Memorial Fund" and "Reception Committee--James A. Farley, Postmaster General...," a pin, and a button, "Votes for Women 1915" (1986.0390); (through Peter H. Bridge): 235 pieces of Confederate currency, 4 Confederate 6% coupon bonds, and a leather checkbook holder all from the collections of Gen. Philip H. Sheridan (1984.0787); (through Nathan R. Einhorn): 24 objects used by Nannie Helen Burroughs and her school (1980.0752); 4 Philippine paper currency items, 1940s (1984.0965); (through Elena Zahirpour): 7 U.S. decoration medals and badges (1986.0521); Manuscript Division (through James H. Hutson): 228 philatelic covers, 47 mint and used stamps, 7 aerogrammes, and a stamped brochure (1983.0216); 414 postage stamps, 90 covers, and a customs stamp (1984.0677).
- U.S. National Aeronautics and Space Administration, Goddard Space Flight Center (through Connie Higgs): 9 batteries and 6 electrochemical cells (1984.0630).
- U.S. Postal Service (through Rita L. Moroney): transmitting unit and receiving unit used to send the first INTELPOST transmissions between Washington, New York, and London and 55 originals and copies of early transmissions, ca. 1979 (1985.0358); electric cancelling machine used at the Amundsen/Scott South Pole Station from 1956 to 1984 and 17 blotting wheels (1985.0724); 3 Postmaster's account ledger books and a deposit receipt kept by Simeon Decker at Shoemaker, Pennyslvania from 1898 to 1907 and 2 money order ledger books kept by Charles E. Van Allen at Coolburgh, Pennsylvania from 1902 to 1903 (1985.0740); International Postal Affairs Department (through Irma Harrison): 3 mint stamps and a souvenir sheet of the Yemen Arab Republic (1984.0400); International Relations Branch (through Michael J. Regan): 4,996 mint stamps and 323 souvenir sheets of the Universal Postal Union countries (1983.0141); 6,062 mint stamps, souvenir sheets, and labels of the Universal Postal Union countries (1984.0014); 60 mint stamps of Austria (1985.0020); 1,230 mint stamps and 34 souvenir sheets of Austria, Japan, and the People's Republic of China (1985.0109); Mail Processing Department (through Randy R. Bailey): 3 plastic mail sacks, a mail sack clamp, cardboard mail tray

and sleeve used for large volume mailing, and a plastic letter tray used to transport mail in and between postal facilities (1984.0693); Office of Consumer Marketing (through W. L. Davidson, Jr.): 285 first day of issue cancellations and event postmarks (1984.0757); Stamp Management Branch, Stamps Division (through James R. Williams): 54 U.S. commemorative panels (1983.0558); 5,140 mint stamps, panes, commemorative panels, souvenir pages, and items of postal stationery of the U.S. (1984.0082); 286 mint stamps, first day covers, souvenir programs, and commemorative panels of the U.S. (1984.0670); 7,319 stamps, 36 commemorative panels, 33 postal cards, 33 souvenir cards, 28 first day covers, 25 souvenir programs, 12 stamped envelopes, 8 air letter sheets, and 8 full imperforate sheets (1985.0210).

- U.S. Veteran's Administration, Office of Prosthetics & Orthotics Research: 130 artificial limbs and accessories (1978.1026).
- United States Federal Corporation (through Victor Hugo): gold and a silver 1986-S Flying Eagle proof coins (1985.0915).
- United Telegraph Workers (through Jerry Grim): lapel pin and a sheet of letterhead from the United Telegraph Workers (1986.0238).
- Unknown: vase and bowl by Charles Walter Clewell of Canton, Ohio (1982.0503); walking beam for a star spudding rig (1983.0085); 1,357 used stamps from the U.S. and various foreign nations (1983.0143); 15 mint stamps of Cuba (1984.0869); 442 stamps, 88 covers, and a meter strip (1985.0546); one pound bank note from Biafra and a 200-leva bank note from Bulgaria, both distributed by the Franklin Mint (1986.0033); 260 stamps, 6 meter strips, and a cut corner paper cancellation (1986.0069); 9 pieces of Ku Klux Klan sheet music (1986.0309).
- The University of Utah, School of Medicine, Department of Surgery, Endoscopic and Laser Surgery Unit (through Dr. John A. Dixon and Michael Mattsson): Swartz Endophthalmic laser fiber, 1980; 600u metal adaptor fiber used for colon polyp removal, 1978; and an argon laser fiber with a metal handpiece for dermatology, 1977 (1985.0237).
- Barbara A. Van Allen in memory of Neil G. Van Allen: 3-wheeled Westcoaster van used to carry mail under the City Delivery Service, 1966 (1985.0372).
- Julie Van Beek: Stromberg-Carlson radio (1984.0149).
- Mrs. F. William Van Kirk: button "Herbert Hoover 1932" (1985.0244).
- J. Varden: carved wooden butcher stamp to mark meat as being kosher (1981.0126).
- Varian Associates (through Martin E. Packard): 2 laboratory notebooks kept by William Earle Bell, 1957, and Arnold L. Bloom, 1958 (1981.0571); Rubidium 87 vapor absorption cell and brass microwave cavity with 2 threaded discs to screw into cavity and a proton magnetometer made by Varian Associates in leather carrying case with sensor and connecting cable (1984.0668).
- Varian Canada Inc. (through George Tibensky): Varian Associates Rubidium magnetometer readout instrument and oscillator consisting of cylindrical optical sensor package and sensor electronics connected by a cable (1981.0381).
- Nathanael P. Vereide: Lufkin tape measure on a reel (1985.0817).
- J. F. Viar, Sr.: repair record card for Baltimore and Ohio mail car number 79, 1919-48; postal route map for North Carolina dated May 1, 1949; and a postal route map for Virginia dated May 1, 1956 (1985.0568).
- Video Music International, Inc. (through Jack Millman): "Startime" video jukebox (1984.0885).
- Lucy M. Vinson: 2 woman's girdles and a brassiere, 1956-60, and 2 credit cards, 1956-65 (1984.0376).

- Herman J. Viola: Smith & Wesson .44 caliber revolver with shortened barrel and ivory grips (1981.0832).
- Virginia Hot Springs, Inc., The Homestead (through David Wm. Ingalls): exercise bicycle designed by Dr. Max Herz and manufactured by The KNY-Scheerer Company of New York (1986.0374).
- Robert M. Vogel: Automatic Rotary Cylinder toy printing press made by the Cincinnati Time Recorder Co. of Cincinnati, Ohio, 1930s (1983.0841); Frank S. Betz wall cabinet electro-therapeutic device, ca. 1910; a leucodescent lamp in a box with 3 filters; and a leucodescent lamp with 3 filters and a pulley counterbalance (1985.0967); Burroughs Model 9 adding machine, 1905-20 (1986.0092).
- Maria von Mattheissen: 6 mounted black and white silver gelatin photographic portraits of James Merrill, Douglas Fairbanks, Jr., Madame Alexander, Nathaniel P. Reed, Mrs. Robert Young, and Morton Downey (1985.0901).
- Alice Dodge Wallace: academic gown from Oxford University, 1908, including robe, cap, hood, and patch, all worn by Shirley Townshend Wing, 1885-1926 (1984.0841).
- Dorothy M. Wallace: 5-piece green velvet costume and a 3-piece white satin costume worn by late 19th-century vaudeville performer Bessie Bonehill (1986.0432).
- Maxine Cook Wann: button, "Patriarchy, The Great Phallusy" (1986.0411).

 Edward J. Ward: Wesson rimfire pocket rifle with shoulder stock and fitted case, 1870, and a Colt semiautomatic pistol with a holster, web belt, magazine pouch, 3 magazines, and 2 cleaning rods (1983.0736).
- Wilcomb E. Washburn: green gym shorts, ca. 1930 (1985.0272).
- Teru Watanabe: calligraphic scroll of excerpts from the New Testament written in Chinese by Tomoichi Watanabe in 1937 (1986.0598).
- Waterbury Companies, Inc. (through David S. Ebersole): 9 U.S. Post Office Department button dies (1985.0218); 8 button dies for 2 pairs of coat buttons and cuff buttons from both the Chesapeake and Potomac Telephone Company and the Postal Telegraph Company (1985.0221); 2 button dies used to make buttons for St. Elizabeth Hospital and the U.S. Customs Service (1985.0246); 21 dies for making clothing buttons for various U.S. government agencies (1985.0336).
- C. Malcolm Watkins: unglazed ceramic tile from San Antonio Mission in California, ca. 1820 (1978.0640); brass and silver-plated nickel lantern, possibly fireman's lantern, ca. 1855 (1984.0283); water can with one glass attached from Northern Railroad, ca. 1860; metal oil can from NYNH&H Railroad, ca. 1900; and an inspection torch from B&M Railroad (1984.0284).
- Hilda K. Watkins: 2-piece woman's dress worn by donor's mother, Clara Whitney at the birthday ball for the Emperor of Japan, 1884 (1985.0733).
- Joan Pearson Watkins: niche with figure of St. Joseph and Holy Child Jesus, Philippine Islands, 19th century (1983.0074); 2 Chinese-American costume elements and an oil painting of the Holy Child in a tin frame (1983.0389); Chinese-American gate-leg table stained opaque red and a Chinese-American shop sign, both made in California in the late 19th century (1985.0844); pair of gray translucent galoshes for high-heeled shoes, 1955-65 (1986.0426).
- Roberta C. Watrous: British medal by John Milton, October 4, 1777 (1984.1111). Tommy Wayman: polo helmet, autographed by Mr. Wayman (1984.0521).
- WEBCO Records (through Wayne E. Busbice): phonorecord by Brooke Johns (1984.0879).
- Wm. R. Weber: 2 California Market Merchandise Certificates issued in San Jose,

- California in 1936 (1985.0367).
- Elaine Greening Ames Weed: trunk made of brass, mahogany, and elephant hide by Waterman Brown for the Ringling Bros. Circus in 1874, a set of brass keys, and a set of 2 books dated 1853 and 1873 (1986.0596).
- John R. Weimer, M.D.: photograph of a 1911 Simplex automobile with a "Buckle-Up" cancelled stamp on the back, cancellation used November 1 through December 31, 1985 (1985.0965).
- Dr. Judith Anderson Weise: embroidered quilt commemorating the Pan American Exposition made by Ellen Sophia Cecilia Larson and Hulda Fredericka Larson, early 20th century (1986.0032).
- John Conrad Weiser: 6 hair nets, 4 Saniform mouthwash tablets, 2 "Boye" dress fasteners, 2 toilet pins, a safety razor, spool of silk thread, hair pins, Kilzo insect powder, and a pair of "Tack-on Soles" (1984.0557).
- Sidney Weiser: USI TransfeRobot arm invented by Mr. Weiser with slip ring assembly, 3 fuse chips, and adjustable mirror mount (1984.0648).
- James B. Weist: Railway Mail Service clerk's badge with number 84964 assigned by the Postal Transportation Service (1985.0059).
- Western Publishing Company, Inc. (through Raymond C. Butman): "Golden Round the World Calendar" for 1974 written in braille (1984.0733).
- Western Union Telegraph Company (through Anthony B. Leitch): Burroughs Class 3 adding machine (1986.0192).
- Phyllis S. Wetherill: 6 cookie cutters and a cutter set (1985.0846).
- Roy Wheeler: photograph of the U.S. fleet at anchor at Culebra, Puerto Rico in 1924 (1984.0721).
- The White House, Office of the Curator (through Betty C. Monkman): group of 19 rolls of microfilm of White House inventories, 1901-80 (1985.0501).
- John H. White, Jr.: souvenir ashtray of Detroit, Michigan picturing a clock and the words "Standard Time" (1984.0554); cast bronze sign from a Pullman railroad passenger car, ca. 1880 (1985.0086); 3 shelf clocks, one made by Ansonia Clock Company with a blue ceramic case, ca. 1900, one with a figure of Franklin Roosevelt with a clock movement made by Jerger Clock Company and a clock case by the Gibralter Electric Company, ca. 1940, and one made by the British United Clock Company, Ltd. with a figure and bicycle, ca. 1900 (1986.0298).
- Joseph H. White III and Wilma Joan White: 2 sword belts, a dress hat, and a long dress coat used by Dr. Joseph Hill White when a Lieutenent Colonel in the U.S. Public Health Service, ca. 1905 (1985.0767).
- Lilya S. White: Finnish-American egg beater made by Mrs. White in 1980 (1980.0748).
- Roger B. White: Appleton car mover used on the Baltimore and Annapolis Railroad (1983.0786); Miro road flare, ca. 1941 (1984.0935); section of fluted metal siding made by Budd Red Lion for railroad cars (1985.0081); automobile garment hook, ca. 1982 (1985.0638); 17 pieces of sheet music (1985.0874); 2 pamphlets, "America Today and Tomorrow John Glenn Talks about his Goals for our Country" and "Gerald R. Ford Our 38th President Destiny's Dark Horse: America's First Unelected President" (1986.0062); 12 pieces of sheet music (1986.0315).
- Florence S. and Gladys M. Whitehead: Birge & Ives shelf clock, 1832-33 (1985.0941).
- Maxwell Whiteman: 62 Afro-American figurines and a lithograph titled <u>Busy Spot</u> (1984.0053).
- Stanley E. Whiting: Monroe calculating machine in case with instruction pamphlet, 1947 (1986.0131).
- Mary Turner and Richard A. Whitney: 2 WW I posters, "Books Wanted" from the

- USMC and "America Calls, Enlist in the Navy" (1985.0764).
- Kenneth S. Widelitz: Radio Shack TRS-80 Model I microcomputer with monitor, 2 groups of software diskettes, and 9 pieces of reference materials (1983.0159).
- Kenneth S. and Milton A. Widelitz: IMSAI 8080 microcomputer assembled by Kenneth S. Widelitz in 1977 with 8 interior components, 7 pieces of software, a Mullen extender board, Micropolis dual drive, and a Sanyo monitor (1983.0043).
- Edward A. Wiesman: 113 postage stamps with fancy cancellations (1985.0671). Lillian A. Wiland: 3 letters written by John A. Sinclair to members of his family while serving aboard the U.S. Revenue Schooner Ewing during the Mexican War, 1846-47 (1985.0140).
- Joseph L. Wiley: 16 pieces of presidential memorabilia (1985.0036).
- Fred J. Wilkinson: 6 theater glass lantern slides advertising Quigley's Garage, Varley's Tire and Battery Service, and Todd's Highway Express, 1930s (1983.0790).
- J. Walter Wilkinson: 6 oil paintings by Mr. Wilkinson and 8 posters, 4 color negatives, 2 sketches, and a photograph derived from the paintings and used to sell war bonds and stamps during WW II (1984.0653).
- Betty V. Williams: Buddington drafting tool, notebook with stitchery samples, and a miniature sleeve (1984.0076).
- Edna Williams: toy cannon with lid from the original box made by Milton Bradley Co. of Springfield, Massachusetts, 1914 (1986.0104).
- Gordon T. Williams, Jr.: oldest chain saw in America manufactured by Andreas Stihl, 1927 (1982.0788).
- Mrs. Donald E. Willman in memory of Captain Donald E. Willman, USN: U.S. Navy officer's chapeau worn by Capt. Donald E. Willman while a Lt. (jg.), 1938 (1984.0299).
- University of Wisconsin-Stevens Point Foundation, Inc. (through Leonard L. Gibb): 2 glass nozzles, a ruby rod for Spacerays 500 joule ruby laser, and a quartz nozzle for skin cancer application (1985.0270).
- Bella W. and Estelle S. Wiser: overskirt of crocheted wool, ca. 1912, and a brass pan used to prepare food for Purim, ca. 1900 (1986.0102).
- Harold Withers: shooter's harness of leather and cast iron brackets (1982.0223).
- Gretchen Leah Witt: woman's evening dress of maroon velvet and rose acetate by Victor Costa, 1981 (1986.0403).
- Kathleen J. Wojan: transparent amber Depression glass cream soup bowl made in the "Diana" pattern by the Federal Glass Company of Columbus, 1937-40 (1985.0628).
- Bertha Wolman: 4 political buttons, 2 lapel pins, 2 handkerchiefs, and a T-shirt, all with various slogans inscribed on them (1984.0986).
- E. D. Wolski: 200 postage stamps of Poland and 150 postage stamps of Germany (1984.0742).
- Women's Vote Project (through Susan J. Smith): 2 buttons, 2 leaflets, 2 stickers, and a card, all relating to voting and women (1985.0126).
- David E. and Marilyn A. Wood: bottle of PDQ bug killer and a bottle of acetate of potassium (1984.0552).
- Philip Wood: warm-up jacket from the Washington Senators baseball team, 1939 (1986.0430).
- Evelyn R. Woolf: mirror with porcelain frame decorated in high relief with flowers and putti, made in Meissen, Germany, late 18th-19th century (1984.1138).
- George W. Workman: police badge marked "Cook/Jail" (1984.1021).

..

- Larry M. Wright: 17th-century British token salvaged from the Delaware River (1986.0469).
- Richard L. Wright: 5-piece U.S. Post Office Department letter carrier's uniform, ca. 1960 (1984.0601).
- Wright State University, School of Medicine, Department of Medicine in Society (through Jack M. Groves, Marvin R. Manker, and Harvey A. Siegal, Ph.D.): adult-sized tank and accessories used to measure body volume by air displacement, developed and used at the Fels Research Institute (1985.0142).
- Xerox Corporation (through David J. Kearns): Xerox model 914 fully automatic plain paper copier, 2 servicing field handbooks, and an empty can of Haloid Xerox film remover (1985.0669).
- Joseph Yakaitis: Mauser semiautomatic pistol with magazine, made in Germany (1981.0572).
- Edward S. Yambrusic: 4 Croatian Easter eggs (1981.0456).
- Alvin C. and Gladys F. Yantiss: fragment of handwoven patterned heavy white household linen, 18th century (1985.0640).
- Jay Dee and Joan Yearous: advertising blotter, 1941 (1984.0523).
- Arthur K. Yellin, R.Ph.: Galton Whistle with rubber bulb (1986.0213).
- Jean H. Youngren: 1,273 mint and used stamps of the United States, 8 mint stamps of Poland, and 6 mint and used stamps of the Confederate States of America (1984.1018).
- Betty McGlaughlin Youssef: 24 photographs of the Youssef family and friends autocamping in North Carolina and the West, 1928, and sleighing at Mount Rainier, Washington, 1925 (1985.0587).
- Gene Zaner: 19 U.S. and French first day covers commemorating the 50th anniversary of Charles A. Lindbergh's solo flight across the Atlantic Ocean, May 20-21, 1977 (1985.0762).
- Carl Zeiss, Inc. (through Thomas L. Van Cader): student retina pathology set, early 20th century (1986.0305).
- David E. Zeitlin: 4 examples of "Whieldon-type" English creamware including a tea caddy, teapot, sugar bowl, and part of a vielleuse, ca. 1760 (1985.0749); refined earthenware coffeepot with cover made in Staffordshire, England, ca. 1755 (1986.0041).
- Zenith Electronics Corp. (through William A. Nail): acousto-optic laser deflector and light modulator (1985.0290).
- Jeanne R. Zeydel: aluminum hors-d'oeuvre tray made by the Continental Silver Co., Inc. of New York, 1920s-50s (1986.0080).
- Anne B. Zill: banner, "While there is a soul in prison..." (1985.0943); 139 cause-oriented posters, 10 bumper stickers, 4 sheets of stickers, 2 handbills, a magazine, book, and a leaflet (1986.0231).
- Zilog-Exxon Information System (through Norm Weise): microchip Z8400P-Z80CPU (1984.0123).

NATIONAL MUSEUM OF NATURAL HISTORY

Donors of Financial Support

Mrs. Cindy Ahearn Dr. J. Frances Allen America-Mideast Educational and Training Services, I Dr. J. Lawrence Angel Anonymous Dr. Arnfried Antonius Dr. Lawrence R. Ash Mr. Herbert Athearn Atherton Family Foundation Cratus H. Bailey Mr. John Bailey Mr. W. S. Bailey Leslie Ann Barfield Dr. R. W. Barker Dr. and Mrs. Thomas A. Bartlett Dr. Frederick M. Bayer Dr. and Mrs. Richard H. Benson Dr. Frank Bernard Dr. Constance E. Boone Dr. and Mrs. Donald T. Bosch Dr. Kenneth J. Boss Mr. Thomas M. Bown Mrs. James Boyers Ms. Diane F. Bradley Twila Bratcher Gerow D. Brill Dr. Mary Campbell Brill Mr. and Mrs. J. Buckler Harvey R. Bullis, Jr. Dr. and Mrs. John B. Burch Dr. and Mrs. Thomas Burch Esther T. Burditt W. Franklin Burditt Dr. C. M. Burgess Dr. and Mrs. John Burns Mr. and Mrs. Roy J. Burroughs Mr. Walter J. Byas Dr. and Mrs. Stephen Cairns Mr. Gordon A. Campbell Ms. Juliette Campitello Mr. and Mrs. David G. Cargo Mr. and Mrs. Frederick B. Carlson Gerow Carlson Mr. H. J. Carlson Marion B. Carlson

Dr. and Mrs. James T. Carlton

. 5

Mrs. Helen M. Carpenter Walter N. Carpenter Jean M. Cate Dr. Walter O. Cernohorsky Dr. and Mrs. Fenner A. Chace. Jr. Mr. Roy W. Chamberlain Marion E. Chamberlayne Chicago Pneumatic Tool Company Mr. Harry W. Christenson Mr. Myung Wook Chun Dr. Roy S. Clarke, Jr. Conchologists of America. Inc. Dr. Cliff Coney Mr. and Mrs. Richard Cooke Dr. G. Arthur Cooper Mrs. Emma Corella Cousteau Society Mr. George B. Craig, Jr. Mrs. Roberta D. Cranmer Dr. John H. Cross Roger J. Cuffey Curtice-Burns/Pro-Fac Foundation Dr. Charles N. D'Asaro Dr. Donald R. Davis Mr. and Mrs. William J. Decker Delaware Museum of Natural History Dr. Ralph W. Dexter Dr. and Mrs. Robert T. Dillon, Jr. Mr. John Dorman Ms. Mildred A. Doss Miss Maureen E. Downey Dr. and Mrs. Wilbur G. Downs The Max and Victoria Dreyfus Foundation, Inc. Mrs. Mary Alice Dunham Earthwatch Eastern Construction Sandra Shands Elligers Embassy of the Republic of Korea Mr. and Mrs. Arthur J. Emery, Jr. Dr. Howard B. Emery EXXON Corporation Dr. and Mrs. Richard H. Eyde Phyllis Fauntleroy Mr. and Mrs. Marvin S. Fenchel Mrs. Margery D. Fenton Mr. Henry J. Fleck

Dr. and Mrs. Oliver S. Flint, Jr. Mr. and Mrs. Samuel M. Fox, III Mr. and Mrs. D. B. Francy Dr. Dorothea Franzen Mr. Thomas E. Frothingham Mr. and Mrs. Deane P. Furman Mr. Calvin B. Galloway Mr. and Mrs. Joseph D. Gatto General Shale Products Corporation Dr. Eugene J. Gerberg Mr. and Mrs. Charles L. (Raye) Germon Girl Scout Council of the Nation's Capital, Association, No. 33, Service Unit No. 2 Mr. and Mrs. A. O. Goenner Dr. and Mrs. Stephen J. Gould Greater New York Chapter of the American Gloxinia and Gesneriad Society Dr. Suzanne Hamilton Drs. M. G. and Julia Harasewych Mr. Thomas Harris Ms. Phyllis G. Harrod Dr. and Mrs. Harold W. Harry Dr. and Mrs. John C. Harshbarger, Jr. Mr. C. W. Hart, Jr. Mr. and Mrs. Parker T. Hart Mr. and Mrs. H. E. Hasse Hawaiian Malacological Society, Inc. Mr. and Mrs. Joseph C. Hayes Mr. and Mrs. Gary F. Hevel Carole S. Hickman Mrs. Amy Higgins Mr. Andrew J. Higgins
Dr. and Mrs. Robert P. Higgins Mr. Andrew J. Higgins Dr. Paul J. Homsher Mrs. Mildred G. Hoot Dr. Richard S. Houbrick Mr. Mohamed Sofi Ibrahim International Palm Society Seed Bank Indo-U. S. Subcommission on Education and Culture Jackson Shell Club, Inc. Mr. and Mrs. Hae Seong Je Dr. Russell H. Jensen Mrs. Anne Joffe

Richard I. Johnson Family Foundation Mr. Russell C. Johnson Mr. Russell C. Johnson

Soon J. Johnson and Robert H. Johnson

Dr. and Mrs. Don Michael

Mr. and Mrs. Paul S. Mikkelsen Dr. Charles R. Joyce

Ms. Winifred Kagwa Dr. and Mrs. M. N. Kaiser Mary L. Kallander Yoshio Kando Mr. Myung-hak Kang Dr. Alison Kay Dr. Myra Keen Dorothy T. Kelley Mr. and Mrs. Donald C. Kent Dr. and Mrs. Porter M. Kier Mr. Kwang Jeon Kim Ms. Gloria Kingston Mr. Michael P. Kingston Dr. Marc J. Klowden Mr. and Mrs. Kenneth L. Knight Mr. Richard Knight Korean American Women's Society of Greater Washington The Korean Foundation Dr. Louise R. Kraemer Ms. Mary J. Kraus Sara F. Kraus Dr. Karl V. Krombein Robert E. and Nedra C. Kuntz Ms. Nancy J. Kwon Ms. Florence LaBruzza Susan T. Lake Catherine L. Lamb Mr. David S. Lemb Dr. Robert S. Lane Laurel Garden Club Mr. and Mrs. Roger Lavoie Mrs. Alexander S. Lawson Mr. and Mrs. Choon K. Lee Mr. and Mrs. Jerome Leszkiewicz Dr. Franz Von L.
Dr. Glenn A. Long
Long Island Shell Club, Inc.
Mc Charlotte S. Lovejoy
Lyons Joan C. Madden Virginia O. Maes Mr. Louis A. Magnarelli Edgar J. Maiz Mrs. Lilly King Manning Ms. Barbara A. Marsden Mrs. Beryl N. McCleary Mr. and Mrs. Gregor McCurdy Dr. and Mrs. Albert R. Mead Dr. Roger W. Meola Dr. Artie Metcalf Dr. Thomas P. Monath

Alice Morrell Mrs. Dorothy D. Morrison Mr. and Mrs. Theodore Moser Dr. Harold D. Murray Mr. Seunghee Nah National Capital Shell Club National Geographic Society National Geographic Society for Research New York Shell Club, Inc. New Zealand Embassy New Zealand Government Acc. W. Jan Newhouse Leslie Newman Dr. Wesley R. Nowell, Lt. Col. USAF (Ret.) Dr. William B. Nutting Royce L. Oliver Phyllis Parkinson Dr. and Mrs. Juan Jose Parodiz Penninsula Korean-American Women's Ms. Ellen D. Peterson Mr. and Mrs. Richard E. Petit Mrs. Mildred C. Petralito Dr. Marian H. Pettibone Dr. Cornelius B. Philip Ms. Marilyn F. Pittore Mr. and Mrs. John Alden Pond Dr. Hugh J. Porter Dr. Annie K. Prestwood Dr. Robert S. Prezant Mr. and Mrs. Freeman Prior Dr. Frank J. Radovsky Mr. Alex Raikhel Statia B. Ramage Ms. Jo-Carol Ramsaran Mr. Lloyd E. Raport Mr. and Mrs. Warren F. Rathjen Dr. and Mrs. Harald Rehder Mr. Joseph W. Reiff Arthur H. Rice Mr. and Mrs. Samuel Ridgeway Mrs. Mary Ripley Mr. S. Dillon Ripley Pamela Roe Dr. and Mrs. Clyde F. E. Roper Mrs. Mary C. Rosewater Dr. and Mrs. Fred H. Rowe Dr. Klaus G. Ruetzler Dr. and Mrs. Raymond E. Ryckman Dr. and Mrs. Curtis W. Sabrosky

Dr. Duane A. Schlitter Ms. Ruth O. Selig Dr. Charles Seymour Dr. Donald R. Shasky Dr. Abe Sheingorn Dr. and Mrs. Alexis Shelokov Mr. and Mrs. Philip W. Signor Mr. and Mrs. David Smith Dr. Jerome H. Smith Mr. Sidney Sober Mr. and Mrs. Soon Hue Son Dr. and Mrs. Victor G. Springer Mr. Stanton C. Staats Mr. and Mrs. Bert B. Stafford Mr. David H. Stansbery Mr. John Staples Mr. Warren E. Steiner, Jr. Mr. and Mrs. Richard Stewart Mr. and Mrs. G. T. Strickland Summer Gerard Foundation Mr. and Mrs. Emery F. Swar Dr. Jane B. Taylor Myra L. Taylor Dr. Ralph W. Taylor Mr. and Mrs. Robert B. Tesh Mr. and Mrs. John Thomas Dr. Prof. Jose W. Thome Mr. and Mrs. D. C. Thompson Mr. and Mrs. Don J. Tillotson Mr. and Mrs. John E. Tobie Dr. and Mrs. Robert Traub Mr. and Mrs. Melvin A. Traylor, Jr. Dr. Donna D. Turgeon Dr. Ruth D. Turner United Nations Educational, Scientific and Cultural Organization Mr. James W. Vanderbeek Mr. and Mrs. Jerome W. Vangorkom Dr. Michael Vecchione Herman J. Viola Dr. and Mrs. Harold E. Vokes Mr. and Mrs. Lawrence L. Waitt Miss Linda A. Ward Mr. Jin Hyun Weatherly Mr. Emilio Weiss Dr. and Mrs. Thomas H. Weller Mr. John R. Weske Mrs. Annie Beatrice Wetmore Dr. and Mrs. M. G. Wheatcroft Dr. Karl M. Wilbur Mr. and Mrs. Roger W. Williams Dr. Scott L. Wing Rebecca G. Woodell Mr. W. H. Woodin

Walter E. Sage, III

Rudolf and Amelie Scheltema

World Wildlife Fund Mrs. Jean Davies Wright

Dr. Shi-Kuei Wu Mr. Dale E. Wykoff

Mr. Paul S. Yi Mr. Sam Kyun Yoon

The Zoological Society of London

NATIONAL PORTRAIT GALLERY

Benefactors of Financial Support

Anonymous Donor
Antiques Group
Mr. and Mrs. Max N. Berry
The T. M. Evans Foundation
General Dynamics Corporation
The Clarence and Jack Himmel Foundation
International Foundation for Art Research
The Lyndon Baines Johnson Foundation
Frances H. Kimball
The Lachaise Foundation
Robert L. McNeil, Jr.
Media Projects Incorporated
Lillian B. Miller
Stephen C. Millett
New York Community Trust

Peace Pardners
Herman Perlman
ProServ Inc.
Chlorinda V. Russo
Schieffelin & Co.
Southern Maryland Antique
Arts Association
Time-Life Books Inc.
University of California,
Riverside
Washington, Inc.
The Washington Post
Westinghouse Electric
Corporation

NATIONAL PORTRAIT GALLERY

Donors to the Collection

The Barra Foundation Barbara Ives Beyer Mr. and Mrs. Barry Bingham, Sr. Margaret Sterling Brooke Carolyn K. Carr Gilbert Grosvenor Coville Mina K. Curtiss Granville Davies Robert L. Drapkin Mrs. Werner Drewes A. Richard Ely Mr. and Mrs. Thomas M. Evans Monroe Fabian Charles Feinberg Mr. and Mrs. Daniel Fendrick Mr. and Mrs. Alan Fern Barbara A. Hart Kenneth I. Ives Thomas Jefferson Memorial Foundation Suzanne C. Jenkins Gene Kelly

Mr. and Mrs. John W. Kenney Mary Tarleton Knollenberg Mrs. Katie Louchheim Mr. and Mrs. Dudley Lyons Nello Marconi Lillian B. Miller Marc Montefusco Col. Merl M. Moore, Jr. Barbara Novak Herman Perlman H.S.H. Prince Rainier of Monaco Elizabeth Rhoades Reynolds Marvin Sadik The Family of Kate and Laurens Seelye Muriel Seligman The Smithson Society Mr. Donald Vogler Sandra Westin The Women's Committee, Smithsonian Institution

OFFICE OF HORTICULTURE

Donors to National Orchid Collection

Lt. Col. and Mrs. Charles P. Raflo: 31 Phalaenopsis. Milan D. Fiske: 169 orchid hybrids and species.

Donors to the Trees of Christmas Ornament Collection

DiMarVa Chapter, American Bell Association International, Inc.: 793 bells for the Christmas tree "Bell Tree."

Martha Washington Chapter, Smocking Arts Guild of America: 436 ornaments for the Christmas tree "Smocked Tree Ornaments."

Virginia Smith: 100 crocheted ornaments for the Christmas tree "Snowflake Tree."

Auseon family of Columbus, Ohio: 153 ornaments for the Christmas tree "The Family of America."

Debby Hornyak and family: 59 ornaments for the Christmas tree "Action Santas."

Quilters Unlimited of Northern Virginia: 601 ornaments for Christmas tree "Airing the Quilts."

Ruth Sanford Reetz and Marilee McNeilus: 267 ornaments for the Christmas tree "Christmas at the Beach."

Bruce Buntin and Cecila Stansfield: 400 ornaments for the Christmas tree "Contemporary American."

The National Society of Tole and Decorative Painters, Inc.: 514 ornaments for the Christmas tree "Tole: Art of the Heart--Heart of the Art."

The National Rural Letter Carriers' Association and the National Philatelic Collection: 200 ornaments for the Christmas tree "Christmas Mail-- Delivering Holiday Cheer."

Donors to the Library Collection

Maryhope C. Jacks: 26 books, pamphlets and trade catalogs on retail floristry and related, published from 1889 through 1961.

Ikebana International: Eight books and several issues of the magazine <u>Ikebana</u> International.

Donors to the Artifact Collection

Longwood Gardens: A Colonial Village comprised of mechanical figures and facades depicting the preparation and celebration of Christmas.

Barbara Todd Kennedy: A water color painting by Mrs. Kennedy of a Laelio cattleya orchid.

Donors of Financial Support

Mrs. Mary L. Ripley (\$1000)
Women's Committee of Smithsonian Resident Association (\$3000)
First City National Bank of Austin (\$5000)
James Smithson Society (\$15,000)

OFFICE OF MUSEUM PROGRAMS

National Historical Publication and Records Commission Ford Foundation
The W.K. Kellogg Foundation

OFFICE OF FOLKLIFE PROGRAMS

Donors of Financial Support

Asian Cultural Council
Association of Trial Lawyers of America
Embassy of Japan
Epson Corporation
Hitachi, Ltd.
Japan Foundation
Kibun Company, Ltd.
Matsushita Electric Industrial Company, Ltd.
Music Performance Trust Funds
National Italian-American Foundation
Tennessee Homecoming '86
Toshiba Corporation
Toyota Motor Corporation

Donors of In Kind Support

A. Smith Bowman Distillers Folklore Society of Greater Washington Frito Lay G. Street Fabrics Honeycutt's Fabrics, Inc. The Institute of Continuing Legal Education Makita U.S.A., Inc. Majestic Distillers National Institute of Trial Advocacy New Otani Hotel Pepsi Cola Bottling, Washington Quality Inn Hotel Rock Creek Park Snyder of Berlin Sugar Association Inc. Union Camp Corporation United Airlines Universal Metal Virginia Pork Producers Waco Products Corporation

OFFICE OF SMITHSONIAN SYMPOSIA AND SEMINARS

Donors of Financial Support

James Smithson Society
Fluker's Cricket Farm, Inc.
The Raymond John Wean Foundation
The British Council
Kal Kan Foods, Inc.
The Harry Frank Guggenheim Foundation
Wenner-Gren Foundation for Anthropological Research
Century HealthCare Corporation
World Wings International, Inc., Chesapeake Bay Chapter
Geraldine R. Dodge Foundation
The Commonwealth Fund
Office of Fellowships and Grants
Institute of Psychiatry and Foreign Affairs
Matsushita Electric Corporation of America

SMITHSONIAN RESIDENT ASSOCIATE PROGRAM

Arkay Corporation Emily J. Bueg Chevy Chase Savings & Loan Dimco-Gray Co. Doran Enterprises Edward S. and Germaina M. Gallagher Phillip L. Graham Fund Graphic Communications International Union William and Mary Greve Foundation Hechinger Foundation Mr. and Mrs. Roger Leeds Research Opportunities Fund Seal Products, Inc. Smithsonian Educational Outreach Fund Stephenson Inc. Hattie M. Strong Foundation Times Journal Company Women's Committee of the Smithsonian Associates

NATIONAL GALLERY OF ART

Robert E. Abrams, President, Abbeville Press Samuel K. and Sylvia Abrams Acacia Mutual Life Insurance Company George R. Aceves Virginia B. Adams M. Bernard Aidinoff Alcoa Foundation The Ahmanson Foundation Mr. and Mrs. Edward K. Aldworth Joe L. and Barbara B. Allbritton Mr. and Mrs. James W. Alsdorf American Society of Newspaper Editors Mr. and Mrs. John L. Anderson Anonymous Anonymous gift in honor of Andrew George and Frances Armour Foundation Mr. and Mrs. Isaac Arnold, Jr. The Art Lovers' League, Baltimore The Artery Organization Inc. Mr. and Mrs. William E. Arthur AT & T Gillian Attfield Lily Auchincloss Avalon Fund Mr. and Mrs. Malcolm Baldrige Bank of Virginia Dwight H. and Marian T. Barnes The Barra Foundation Inc. Perry R. and Nancy Lee Bass Robert M. and Anne T. Bass Mr. and Mrs. Sid R. Bass Bechtel Foundation Bell Atlantic Corporation Ruth B. Benedict In memory of Robert P. Benson Mr. and Mrs. George P. Bent, II Mrs. Edwin A. Bergman Robert Hunt Berry George P. Bickford The Siegfried and Josephine Bieber Foundation The Honorable Philip W. Bonsal and Mrs. Bonsal Allyson Booth Robert L. Bowen, Jr. Mr. and Mrs. John G. Bowes Thomas A. and Barbara J. Boyce Mr. and Mrs. George M. Brady, Jr.

Mr. and Mrs. Harry A. Brooks Ann and Donald A. Brown Mrs. Hunter D. Brown Mr. and Mrs. W. L. Lyons Brown, Jr. Ailsa Mellon Bruce Fund David K. E. Bruce Fund Mrs. Ernest R. Bryan Mr. and Mrs. James E. Burke Mr. and Mrs. Edward Burling, Jr. Buffy Cafritz The Morris and Gwendolyn Cafritz Foundation William N. Cafritz Amon G. Carter Foundation Mr. and Mrs. Edward W. Carter The Catto Foundation Carroll J. Cavanagh Dorothy Jordan Chadwick Fund Mr. and Mrs. Homer C. Chaney Mrs. Hubert W. Chanler Mr. Margaret J. Charlton In Honor of My Sister Miriam F. Chazen Mr. and Mrs. Leslie Cheek, Jr. Mr. and Mrs. Marshall Clark Stephen C. Clark, Jr. Nancy J. Clawson in Memory of Linda A. Clawson Richard J. Coffey Melvin S. and Ryna G. Cohen Mr. and Mrs. William T. Coleman, Jr. Collectors Committee Dorothy B. Collins Phyllis D. Collins Mrs. H. Dunscombe Colt Communications Satellite Corporation Catherine M. Conover Dr. and Mrs. Ronald H. Cordover Corning Glass Works Foundation J. Harry Covington, III Covington & Burling in honor of Sydney J. Freedberg The Cowles Charitable Trust Edwin L. Cox Charles E. Culpeper Foundation, Inc. Catherine G. Curran Mrs. Dahar Cury Ann Cylkowski Chester Dale Fund Chester Dale Trust

Leonard and Cecelia Dalsemer Foundation The Arthur Vining Davis Foundations Carley Dawson Dr. and Mrs. Edwin J. De Costa Gloria Harrison Decker The Gladys Kieble Delmas Foundation Wilfrid and Elizabeth Desan Mr. and Mrs. Thomas H. Dittmer Mr. and Mrs. John R. Donnell The Donohoe Companies, Inc. E. I. du Pont de Nemours & Company Mary A. Duncan Cheryl and John Duvall Dynalectron Corporation Carolyn W. Edgar Mrs. Kathleen Bryan Edwards K. S. Egorova Mrs. Robert B. Eichholz Mr. and Mrs. James A. Elkins, Jr. Mr. and Mrs. Robert B. Ellert Mrs. Anne Eustis Emmet Mrs. Charles W. Engelhard Sarah G. Epstein Col. and Mrs. Robert F. Evans Thomas M. and Betty B. Evans Exxon Corporation Frank and Jeannette Eyerly Sherman Fairchild Foundation, Inc. William Stamps Farish Fund Mr. and Mrs. Norman Farquhar Paul B. Fay, Jr. Gail Feigenbaum and William Tronzo The Fein Foundation Mr. and Mrs. John D. Firestone Mr. and Mrs. Donald G. Fisher Annelise and William H. G. Fitzgerald Averell and Pamela Harriman Mrs. Julius Fleischmann Albert Ernst Flemming John Fondersmith Ford Motor Company Mr. and Mrs. Ben J. Fortson Arnold D. Frese Foundation Fribourg Foundation Mr. and Mrs. Richard Friedman Wilbur L. and Cornelia Fugate Norma Lee and Morton Funger JoAnn and Julian Ganz Mrs. Stanley S. Garber Mrs. George Angus Garrett *

Mrs. Johnson Garrett Jess W. Gern Anita L. and Martin J. Gerra Anita L. and Martin C Gordon and Ann Getty The J. Paul Getty Trust Rose and Charles F. Gibbs Mr. and Mrs. John T. Gibson Mr. and Mrs. Gerald Gidwitz Elizabeth H. Gilliam The Gordon/Rousmaniere/Roberts Fund Sheryl K. Gorsuch Paul C. Graffagnino Graham Foundation for Advanced Studies in the Fine Arts Katharine Graham Sarah Greenough Mrs. Gilbert C. Greenway Mr. and Mrs. Henry B. Griswold GTE Corporation Guest Services, Inc. Gulf States Paper Corporation Mr. and Mrs. George Gund, III Leo S. Guthman Miriam and Peter Haas Fund Mr. and Mrs. Walter A. Haas, Jr. Mr. and Mrs. Gilbert Hahn, Jr. Mrs. Najeeb E. Halaby Mr. and Mrs. Prentis Cobb Hale The Hall Family Foundations Mr. and Mrs. Melville W. Hall Hallmark Educational Foundations Sarah F. Halloran Mr. and Mrs. Gordon Hanes Fred and Judith E. Hanhisalo Mrs. Elisha Hanson Mrs. B. Lauriston Hardin, Jr. W. Averell Harriman Charitable Trust Robert C. Harris Cora Hartshorn Arboretum and Bird Sanctuary Mr. and Mrs. Raymond F. Hawtin Richard Seth Hayden Mr. and Mrs. Joseph H. Hazen Mrs. Patrick Healy III
William Randolph Hearst Foundation Hechinger Foundation Mrs. Rudolf J. Heinemann Henry J. Heinz II Joan T. Hemphill

^{*} deceased

David S. Henkel The Henley Group, Inc. Hess Foundation, Inc. Leon Hess Timothy and Frances Hester Kay Higgott Mr. and Mrs. Lee Hills Mr. and Mrs. George C. Hixon In Memory of Walter A. Hobein Janet A. Hooker Charitable Trust John Jay Hopkins Foundation Mr. and Mrs. Clement E. Conger Ms. Anne Horan Mr. and Mrs. S. Roger Horchow Mr. and Mrs. Raymond J. Horowitz William Clell Howze Mr. and Mrs. Edward R. Hudson, Jr. Lesley Hughes Mr. and Mrs. Carlisle H. Humelsine George H. and Tessie A. Hurwitz The George Hyman Construction Company IBM Corporation Mr. and Mrs. R. L. Ireland, III Mr. and Mrs. John N. Irwin II Helen and Philip C. Jessup, Jr. Lucille and George F. Jewett, Jr. Brock Jobe Mr. and Mrs. Deane F. Johnson Mrs. J. Seward Johnson Johnson & Johnson James A. Johnson, Jr. Virginia T. Johnston Samuel Josefowitz Josten Fund, Inc. Broderick M. Jushirjian Department of Justice The Ruth and Jacob Kainen Collection George Frederick Kalbe Dr. and Mrs. William Kalchoff Edward George Kaufman & Ann Claire Kaufman George M. and Linda H. Kaufman Mrs. George C. Keiser Mr. and Mrs. Stephen M. Kellen Carol W. Kelley George H. Kelley Mr. and Mrs. Randolph A. Kidder The Elbrun and Peter Kimmelman Foundation

Mr. and Mrs. Henry L. King Mr. and Mrs. Herbert Kinsolving Mr. and Mrs. David S. Kirkland Mr. and Mrs. Eugene Kirshenbaum Knight Foundation Betty Agee Knox Seymour H. Knox Robert P. and Arlene R. Kogod Mr. and Mrs. Werner H. Kramarsky Mr. and Mrs. David Lloyd Kreeger Neil Kreitman Samuel H. Kress Foundation Wendell Jordan S. Krieg C. V. Kuh and R. Radner Dr. and Mrs. Roy Lambert Mr. and Mrs. W. Loeber Landau Mr. and Mrs. Edward W. Lane, Jr. Ronald S. and Jo Carole Lauder Alexander M. Laughlin Mr. and Mrs. Murray Lebwohl Leighton-Oare Foundation, Inc. Mr. and Mrs. Judd Leighton Marc E. Leland The James H. and Martha McG. Lemon Foundation Inabelle Levin Mr. and Mrs. Irvin L. Levy Mr. and Mrs. James T. Lewis Mr. and Mrs. Sydney Lewis Leonard Liebling Suzanne G. Lindsay Mrs. Chisholm Lindsey Frances and John L. Loeb Foundation Clare Boothe Luce Ant Lukas Asbjorn R. Lunde Michael F. Lynch Fannie Mae Foundation Paul Magriel Mr. and Mrs. Frank L. Mansell Mrs. Malcolm A. Margolies Mars Foundation Michael Marsh Mr. and Mrs. William McC. Martin Maryland-D.C. Suburban Alumnae Club of Pi Beta Phi Mr. and Mrs. Harris Masterson III Armen Matossian Marjorie N. Matthews

Mrs. Robert B. Mayer Alletta * and Peter McBean Mr. and Mrs. John A. McCone Mrs. John I. B. McCulloch Mrs. Eugene McDermott The Andrew W. Mellon Foundation Andrew W. Mellon Fund Mr. and Mrs. Paul Mellon Paul Mellon Collection Collection of Mr. and Mrs. Paul Mellon The R. K. Mellon Family Foundation Ana R. Menapace Dr. Georges and Dr. Lois de Menil David Merrick Arts Foundation Mr. and Mrs. Charles A. Meyer Julienne M. Michel Mark J. Millard* Stephen Caldwell Millet Pepita Milmore Memorial Fund Edith Monroe Moe Mr. and Mrs. Richard W. Moncrief Mrs. O. Ray Moore In Memory of Edith Morris of San Francisco, California William B. Mullins Franklin D. Murphy The Museum of Fine Arts, Houston E. Evelyn Myers Camille de Nacheze Mr. and Mrs. Iain Nasatir Natalia Corporation The National Italian-American Foundation Hugo V. Neuhaus, Jr. Neutrogena Corporation Dr. and Mrs. Stanton P. Nolan Gerson Nordlinger, Jr. The Norfolk Society of Arts Mrs. P. Roussel Norman NS&T Bank Mr. and Mrs. Roy Nutt John O'Brien Ralph E. Ogden Foundation Margaret D. Olsen William B. O'Neal Donald R. Osborn Robert E. and Kay H. Oshel Mr. and Mrs. Mandell J. Ourisman Ruth A. Oviatt The Paisano Foundation William S. Paley

Charles Parkhurst In Memory of Bee Pasek Patricia S. Patterson Patrons' Permanent Fund I. M. Pei & Partners PepsiCo. Milton J. and Carroll Petrie Phillips Family Fund Ivan Phillips James W. Phillips Neil and Sharon Phillips Mr. and Mrs. Sumner Pingree, III Abe and Irene Pollin Mr. and Mrs. Leon B. Polsky Jo Porter Mr. and Mrs. Meyer P. Potamkin Potomac Electric Power Company Amy H. Pound Abbie Norman Prince Trust Princeton University Mrs. A. N. Pritzker Mr. and Mrs. Jay Pritzker Mr. and Mrs. Lenard Quinto Joseph E. Rankin The Raphael Foundation Inc. General Dillman A. Rash Reader's Digest Association Metta R. Rehnberg Reliance Group Holdings, Inc. Mr. and Mrs. Stewart A. Resnick Rhode Island School of Design Mr. and Mrs. Donald H. Richardson Ridgewell's Caterer, Inc. Mrs. Eugene Henry Rietzke The Riggs Bank of Washington, D.C. Mr. and Mrs. Rodman C. Rockefeller Mr. and Mrs. John B. Rogers Cornelius Van S. Roosevelt The Rose Fund, Inc. Arthur G. Rosen Martin N. Rosen Rosenthal Automotive Organization Benjamin J. Rosenthal Foundation John A. and Lucille G. Rosicky The Mark Rothko Foundation Madeleine H. Russell Chlorinda V. Russo Jill and Arthur M. Sackler Dr. and Mrs. Stanley J. Sarnoff Mr. and Mrs. Fayez Sarofim B. Francis Saul Mr. and Mrs. Bob L. Schieffer

^{*} deceased

Elisabeth J. Schindler Roger and Susanne Schlaifer Althea Schlenoff Mr. and Mrs. Benno C. Schmidt Mr. and Mrs. Janos Scholz The Schreiber Family Foundation Samuel Schweid Sculpture and Decorative Arts Curators Fund Evelyn Sharp Mr. and Mrs. Leonard L. Silverstein Dr. and Mrs. Richard A. Simms Carolyn Skelly Helen Ann Simpson Regina Slatkin in memory of Charles E. Slatkin Benjamin B. Smith The Honorable David S. Smith and Mrs. Joshua P. Smith Laura E. Smith Margaret R. Smith Richard S. and Elizabeth A. Smith Robert H. and Clarice Smith Dr. and Mrs. William I. Smulyan Frances P. Smyth Dr. and Mrs. Arthur K. Soloman Sheldon H. Solow Sotheby's Mrs. James R. Sowell Leonard R. Stachura Fund Alice B. Steiner Mr. and Mrs. Michael A. Stephens Howard B. Stevens Ruth Carter Stevenson Mark Stock Atanas A. Stoikov Ruth Stokoe Margaret Dorrance Strawbridge Foundation of Pennsylvania II, Inc. Mr. and Mrs. Bruce G. Sundlun Mr. and Mrs. Edward F. Swenson, Jr. George Szabo Beatrice and S. P. Tao Mary Ann Taylor Eleanor Lee Templeman Mrs. Walter N. Thayer Glenn Thompson Tides Foundation Time Incorporated Mrs. David L. Titus

Mr. and Mrs. Maurice B. Tobin

William L. Topf * Toucan, Inc. Ernst Ullman University of South Florida Foundation US Air U.S.S. Constitution Museum Foundation, Inc. Mr. and Mrs. Gerald Van der Kemp J. Van Der Marck Mr. and Mrs. Langdon Van Norden Mrs. Robert D. van Roijen Herbert A. Vance Trust Mr. and Mrs. James M. Vaughn, Jr. Mr. and Mrs. Arthur Vershbow Richmond Viall VIPA Foundation Volvo North America Corporation Robert C. Vose, Jr. Anne M. Walker Mr. and Mrs. Brooks Walker, Jr. Lila Acheson Wallace/National Gallery of Art Fund Mr. and Mrs. F. Howard Walsh, Jr. Mr. and Mrs. Charles B. Walstrom Mrs. Paul L. Wattis Patricia M. Watts Seymour and Diane B. Waxman Melvin R. Weaver Alan B. Weisman Mr. and Mrs. Keith Wellin Mr. and Mrs. Robert G. Weiss Alan B. Weisman Mr. and Mrs. Alex Wengraf Westinghouse Electric Corporation Hilda Wexler Arthur K. and Susan H. Wheelock Whirlpool Corporation Mrs. John Campbell White John C. Whitehead Mrs. John Hay Whitney Peter A. B. Widener Sarah Glymph Wilcox Mr. and Mrs. William B. Willard Mr. and Mrs. Wallace S. Wilson William and Eleanor Wood Prince Stanley Woodward Eleanora M. Worth Young Presidents' Organization Lawrence Zicklin Harold Zirkin

^{*} deceased

Appendix 9

Benefactors of the Smithsonian Institution in Fiscal Year 1986

As a trust instrumentality of the United States, the Smithsonian Institution has received federal support since it was established in 1846 to carry out the terms of James Smithson's will. Appropriated funds have long provided important additions to the trust funds, donated by Smithson and subsequent benefactors, to enable the Institution to carry out its responsibilities for research and exhibition of the national collections and maintenance of the valuable objects and records of science, history, and culture entrusted to the Institution.

The Smithsonian's basic trust funds have provided the Institution with the elements of flexibility and independence essential to its creative, innovative growth. Trust funds traditionally have made possible many of the research, acquisition, and educational programs that are central to the Smithsonian's achievements.

The Smithsonian is extremely grateful to all foundations, corporations, and individuals for their gifts, bequests, and contributing memberships in the Smithsonian Associates.

The Contributing Members of the Smithsonian National Associate Program support the Institution's work through annual contributions of \$50, \$100, \$250, \$500, \$1,000, and \$1,500.

The James Smithson Society was created in 1977 to encourage and recognize major gifts to the Smithsonian Institution. The Society, which is the highest order of the Contributing Membership in the Smithsonian Associates, is composed of Annual and Life Membership categories. Extraordinary contributions to the Smithsonian Institution are recognized through the Society's Founder Medal award and Life Membership.

The Smithsonian Institution gratefully acknowledges the generous support of the James Smithson Society and the Contributing Membership of the Smithsonian Associates.

JAMES SMITHSON SOCIETY LIFE MEMBERS

Mrs. Anni Albers

Mrs. Joseph V. Alhadeff

Mr. and Mrs. Joe L. Allbritton

Mr. David K. Anderson

Mr. and Mrs. William S. Anderson

Mr. Scott R. Anselmo

Mr. Ronald P. Anselmo

Mr. and Mrs. Richard R. Bains

Mr. and Mrs. F. John Barlow

Mrs. Frederick C. Bartlett

Mr. and Mrs. Preston R. Bassett

Mrs. Donald C. Beatty

Mrs. Henry C. Beck, Jr.

Honorable and Mrs. Ralph E. Becker

Mr. and Mrs. Clay P. Bedford

Mrs. Edward B. Benjamin

Mr. and Mrs. John A. Benton

Mr. and Mrs. William B. Berry

Mrs. Gerald M. Best

Dr. and Mrs. B. Narayana Bhat

Mr. Richard A. Bideaux

Mr. and Mrs. Robert Blauner

Mr. and Mrs. Leigh B. Block

Mr. and Mrs. William Beaty Boyd

Mrs. Hyman Burstein

Mr. and Mrs. Maxwell Burstein

Dr. and Mrs. Benjamin Hubbard

Caldwell, Jr.

Major General and Mrs. Daniel S.

Campbell

Mrs. Catherine B. Cantrell

Mr. and Mrs. Lawson J. Cantrell, Jr.

Mr. Allan Caplan

Mr. and Mrs. George H. Capps

Dr. and Mrs. Robert C. C. Chiu

Mr. and Mrs. Thomas G. Cleveland

Mr. Robert L. Coleman

Dr. and Mrs. George L. Compton

Mrs. Howard F. Cook

Dr. and Mrs. Roger D. Cornell

Dr. and Mrs. Edwin J. Cunningham

Dr. and Mrs. Bruce E. Dahrling, II

Mr. John R. Doss

Mr. and Mrs. Willard D. Dover Mr. Edward R. Downe, Jr.

Dr. Dale B. Dubin

Mr. and Mrs. Willis H. duPont

Mr. Joseph M. Erdelac

Mr. and Mrs. Thomas M. Evans

Dr. and Mrs. Dan Feriozi

Mr. and Mrs. Walter B. Ford, II

Mrs. Edwin Gaines Fullinwider

Dr. and Mrs. Lawrence Andrew Funt

Mr. and Mrs. George Garfield

Dr. and Mrs. Lamont W. Gaston

Mr. Kirkland H. Gibson

Mr. and Mrs. C. Paul Gilson

Mr. and Mrs. Stephen P. Gott

Dr. and Mrs. Wilbur J. Gould

Mr. Jerome L. Greene

Mr. and Mrs. Chaim Gross

Mr. and Mrs. Melville Hall

Dr. and Mrs. Armand Hammer

Mrs. Richard Harkness

Mr. and Mrs. Don C. Harrold

Mrs. Enid A. Haupt

Mrs. Lita Annenberg Hazen

Mr. and Mrs. Wayne C. Hazen

Mrs. Francis Tracy Henderson

Mr. and Mrs. Edward L. Henning

Mrs. Edith Mansfield Hills

Mr. Lee Bronson

Mrs. Joseph H. Hirshhorn

Mrs. David K. E. Bruce

Dr. Ruth Dowling Brunn and

Dr. Bertel Brunn

Dr. and Mrs. George E. Burch

Mrs. Arthur J. Burstein

Mrs. Hyman Burstein

Mrs. Edith Fahistield Hills

Mrs. Joseph H. Hirshhorn

Mrs. James Stewart Hooker

Mrs. James Stewart Hooker

Mrs. James Stewart Hooker

Mrs. James Stewart Hooker

Mrs. Paul Horgan

Dr. and Mrs. Howard Ihrig

Mr. and Mrs. George H. Jacobus

Mrs. Barnet Burstein

Mrs. Barnet Burstein

Mrs. Louis Kaufman

Mr. and Mrs. Louis Kaufman

Dr. and Mrs. Arthur A. Kirk

Mr. and Mrs. Peter Merril Klein

Mr. and Mrs. Samuel W. Koffler

Mr. and Mrs. Lewis Kurt Land

Dr. and Mrs. David Landau

Dr. Maury Leibovitz

Mr. and Mrs. L. E. Leininger

Mr. and Mrs. Harry E. Lennon

Mrs. Sara L. Lepman and

Mr. Joshua M. Lepman

Mr. and Mrs. John Levey

Mr. and Mrs. Robert Levey

Mr. and Mrs. Sydney Lewis Ms. Betty H. Llewellyn

Mrs. John A. Logan

Mr. and Mrs. Jack Lord

Mrs. Louis Lozowick

Mrs. Robert A. Magowan

Dr. and Mrs. Leo J. Malone Mr. and Mrs. Richard A. Manoogian

Mr. John A. Masek

Mr. and Mrs. Vincent Melzac

Mr. Jack L. Messman

Mrs. Sandy Levey Miller

Mr. and Mrs. W. A. Moldermaker

Mrs. Edmund C. Monell

Dr. and Mrs. Walter A. H. Mosmann

Mr. Fredric Mueller

Mr. and Mrs. Joe H. Mullins

Dr. and Mrs. Marvin Murray

Mr. Mortimer L. Neinken

Dr. and Mrs. James Brooks Newbill

Honorable and Mrs. R. Henry Norweb

Mr. and Mrs. Henry K. Ostrow

Mrs. Rudolf Pabst

Judge and Mrs. G. Burton Pearson

Mr. and Mrs. Wallace R. Persons

Mr. and Mrs. Edward M. Pflueger

Mrs. John H. Phipps

Mrs. John A. Pope

Mrs. Abraham Rattner

Mr. John Paul Remensnyder

Mr. and Mrs. Ralph C. Rinzler

Mr. and Mrs. Thomas M. Roberts

Honorable Martin J. Roess

Dr. and Mrs. Richard G. Rogers, Jr.

Mrs. Helen Goodwin Rose

Mr. Arthur Ross

Mrs. Edgar L. Rossin

Mrs. Howard J. Sachs

Mr. and Mrs. Peter G. Sachs

Dr. and Mrs. Arthur M. Sackler

Mr. and Mrs. Harry I. Saul

Mr. and Mrs. Janos Scholz

Honorable and Mrs. Hugh Scott

Mr. and Mrs. Morton Silverman

Mr. and Mrs. Edward J. Slattery

Mrs. Helen Farr Sloan

Mr. and Mrs. Robert H. Smith

Mr. and Mrs. Sherwood Smith

Mr. Raphael Soyer

Mrs. Otto Spaeth

Mr. and Mrs. Earl J. Spangler

Mr. Stuart M. Speiser

Mrs. Benjamin Stack

Mr. and Mrs. Harvey G. Stack

Mr. and Mrs. Norman Stack

Dr. Richard F. S. Starr

Mr. and Mrs. Norman H. Stavisky

Dr. and Mrs. Leo F. Stornelli

Mr. and Mrs. E. Hadley Stuart, Jr.

Dr. and Mrs. Hans Syz

Mrs. Katherine Sergava Sznycer

The Drs. Yen and Julia Tan

Mr. and Mrs. Vernon Taylor, Jr.

Dr. and Mrs. David J. Tepper

Mrs. Edith Hale Thomas

Mr. Richard W. Thomssen

Mr. Bardyl R. Tirana

Mr. Glenn O. Tupper

Mrs. Milton Turner

Dr. and Mrs. Adolfo Villalon

Mr. and Mrs. Robert Vojvoda

Dr. and Mrs. Francis S. Walker

Mr. and Mrs. C. C. Wang

Mr. Richard W. Weatherhead

Mr. and Mrs. Thomas E. Whiteley

Mr. Leonard J. Wilkinson

Mrs. Victoria Wilkinson

Mr. and Mrs. Thomas J. Williams

Mrs. Cuc Kim Withers

Mr. and Mrs. Laurence C. Witten, II

Mrs. David O. Woodbury

Mr. and Mrs. Stanley Woodward

Mr. and Mrs. James Y. M. Wu

Mr. and Mrs. Barry Yampol

JAMES SMITHSON SOCIETY ANNUAL MEMBERS

Mr. and Mrs. W. Mike Adams Mr. and Mrs. Arthur G. Altschul

Mr. and Mrs. William G. Anderson

Honorable and Mrs. Walter H. Annenberg

Mr. and Mrs. Philip F. Anschutz Mr. and Mrs. Jack R. Aron

Ms. Mary M. Ashmore

Mr. and Mrs. John Bartlett Mr. and Mrs. Perry R. Bass

Mr. and Mrs. Barry Bingham, Jr.

Honorable and Mrs. Lucius D. Battle

Mr. Henry C. Beck, Jr.

Honorable and Mrs. Robert O. Blake

Mr. and Mrs. William W. Boeschenstein

Mr. and Mrs. John F. Bookout

Dr. Harold M. Boslow

Mrs. John Bowles

Colonel Donald S. Bowman

Mrs. John W. Bowman

Mr. and Mrs. Bob Brinkerhoff

Mr. Alfred Pope Brooks

Mr. and Mrs. Keith S. Brown

Mrs. Jackson Burke

Mrs. Poe Burling

Dr. J. A. Burwell

Mr. and Mrs. Lawrence Butner

Dr. Cesar A. Caceres

Mr. and Mrs. William Cafritz

Mr. and Mrs. William D. Campbell

Mrs. Winifred Carter

Mr. Frank T. Cary

Honorable and Mrs. Henry E. Catto, Jr. Honorable and Mrs. Robert Horne Charles

Mr. E. Taylor Chewning, Jr. Mr. and Mrs. James H. Clement

Mr. and Mrs. David L. Coffin

Mr. and Mrs. Melvin S. Cohen

Honorable and Mrs. James M. Collins

Mr. Joseph E. Connor

Mr. and Mrs. Richard P. Cooley

Mrs. Raymond E. Cox

Miss Louise Crane

Mr. and Mrs. John David Crow

Mr. and Mrs. Joseph F. Cullman 3rd

Dr. and Mrs. Joseph H. Hazen

Dr. and Mrs. James H. Curl

Mr. Arthur J. Curry

Mr. Kent T. Cushenberry

Mrs. Keith Davis

Mrd. Richard D. Hill

Dr. and Mrs. James H. Curl

Mr. Arthur J. Curry

Mr. Kent T. Cushenberry

Mrs. Keith Davis

Mr. and Mrs. Stanley R. Day

Mr. and Mrs. Morse G. Dial, Jr.

Mr. and Mrs. Charles J. DiBona

Mr. and Mrs. George F. Hoover

Mr. Norman L. Dobyns

Mr. and Mrs. Gaylord R. Donnelley

Mr. and Mrs. Robert Donner, Jr.

Mr. and Mrs. Leslie Douglas

Mr. and Mrs. Archibald G. Douglas

Mr. and Mrs. Robert W. Duemling

Ms. Sara Dwyer

Mr. and Mrs. Leroy Eakin

Mr. and Mrs. J. A. Elkins, Jr.

Mr. John A. Ellerton

Mrs. Eric Eweson

Mr. and Mrs. Sheldon W. Fantle

Mr. and Mrs. Reed M. Fawell, III

Mr. and Mrs. Marshall Field

Mr. Walter Fitch, III

Honorable and Mrs. William H. G.

FitzGerald

Mrs. Julius Fleischmann

Mrs. Clifford Folger

Mr. John Dulin Folger

Mr. and Mrs. William M. Fuller

Mr. and Mrs. Ernest Gallo

Mr. and Mrs. John Gantt

Ms. Louise Dodd Gerken

Mr. and Mrs. Bert A. Getz

Mr. and Mrs. John T. Gibson

Mr. and Mrs. Alfred C. Glassell, Jr.

Mr. Henry Goldberg Mrs. Ted R. Goldsmith Mr. Thomas J. Grady

Mr. William B. Graham

Mr. and Mrs. John Bradley Greene

Mr. and Mrs. Gilbert C. Greenway

Mr. and Mrs. W. L. Hadley Griffin

Mr. and Mrs. Alton B. Grimes

Mr. and Mrs. Gilbert Hahn, Jr.

Honorable and Mrs. Najeeb E. Halaby

Mr. William A. Hall, III

Mr. and Mrs. Kingsley W. Hamilton

Mr. and Mrs. Gordon Hanes

Mrs. W. Averell Harriman

Mr. and Mrs. J. Warren Harris

Mrs. Alfred C. Harrison

Honorable and Mrs. Parker T. Hart

Dr. and Mrs. John T. Hayes

Mr. and Mrs. Edward J. Hudson Mr. R. Bruce Hunter Mrs. Laura B. Hunt Mr. R.L. Ireland, III Honorable and Mrs. John N. Irwin, II Mr. and Mrs. George D. Jagels Mr. and Mrs. George Frederick Jewett, Jr. Mrs. Frances Jingoli Mr. and Mrs. Robert E. Johnson Mr. and Mrs. Samuel C. Johnson Mr. J. E. Jonsson Mr. and Mrs. B. Franklin Kahn Mrs. Garfield Kass Mr. and Mrs. Ira R. Katz Mrs. George C. Keiser Mr. and Mrs. James M. Kemper, Jr. Mr. S. Charles Kemp Honorable and Mrs. W. John Kenney Mr. and Mrs. Thomas M. Keresey Mrs. Virginia K. Kettering Honorable and Mrs. Randolph A. Kidder Mr. and Mrs. William S. Kilroy Mr. and Mrs. F. M. Kirby Mr. James M. Kline Honorable and Mrs. Philip M. Klutznick Mr. Seymour H. Knox Mr. and Mrs. Seymour H. Knox, III Mrs. Elizabeth Gelman Kossow Mr. and Mrs. Edward C. Kubik Mr. and Mrs. James S. Lacock Mrs. S. Kent Legare Mr. Robert Lehrman Honorable William Leonhart Mr. and Mrs. Walker Lewis Mr. William C. Liedtke, Jr. Mrs. Jean Chisholm Lindsey Mr. and Mrs. Lester B. Loo Jack and Betty Lou Ludwick Lt. General and Mrs. Sam Maddux, Jr. Mr. F. E. Mars, Jr. Mrs. John F. Mars Honorable and Mrs. William McChesney Martin, Jr. Mr. Frederick P. Mascioli Mr. David O. Maxwell Mr. and Mrs. Brooks McCormick Honorable and Mrs. Robert M. McKinney Mr. and Mrs. Alexander K. McLanahan Mr. and Mrs. Robert L. McNeil, Jr. Mrs. Henry S. McNeil Mr. and Mrs. Gilbert 7. Mead Mr. and Mrs. Henry W. Meers Mr. Paul Mellon

Dr. Ruben F. Mettler Mr. and Mrs. Arjay Miller Dr. W. Raymond Mize, Jr. Mr. Dan M. Moody, Jr. Mr. and Mrs. Maurizio di Montefano Colonel McLendon G. Morris Mr. and Mrs. Charles H. Murphy, Jr. Dr. Josephine L. Murray Honorable and Mrs. Paul H. Nitze Dr. and Mrs. Stanton P. Nolan Commander and Mrs. Lester Ogilvy Mr. and Mrs. Ricard R. Ohrstrom Mr. George L. Ohrstrom Mr. and Mrs. Lawrence Bruce Olds Mr. John F. Olmstead Honorable Daniel Parker Mr. and Mrs. Jack S. Parker Mrs. Jefferson Patterson Ms. Helen Ann Patton Mr. and Mrs. Sidney Petersen Mrs. Charles Emory Phillips Mr. and Mrs. Charles M. Pigott Mr. and Mrs. George S. Pillsbury Mr. and Mrs. Malcolm Price Mr. and Mrs. Joseph A. Rice Mr. H. Smith Richardson, Jr. Mr. and Mrs. Robert Ridder Mr. and Mrs. Walter T. Ridder Mrs. Dorothy H. Roberts Dr. and Mrs. Milton L. Rock Mr. Laurance S. Rockefeller Mr. Francis C. Rooney, Jr. Mrs. Blanka A. Rosenstiel Mrs. William Roth Mr. John R. Royall Honorable and Mrs. Kenneth Rush Dr. and Mrs. Larry Saiers Mr. and Mrs. William R. Salomon Mr. and Mrs. B. Francis Saul, II Mr. Alton N. Scott Mrs. George M. Seignicus, II Mr. W.W. Sidney Mr. A.R. Jarvis Sinclair Mr. and Mrs. David E. Skinner Mr. and Mrs. Gerard Slawecki Mr. and Mrs. Michael Sonnenreich Mr. and Mrs. Edson W. Spencer Mr. and Mrs. Malcolm Stamper Mr. Arthur J. Stegall Jr. Mr. and Mrs. Sydney Stein, Jr. Mrs. Edith C. Steinbright and Miss Marilyn L. Steinbright Dr. and Mrs. William A. Sullivan Mr. Bruce G. Sundlun

Mr. Craig D. Sutherland

Mr. James C. Taylor

Mr. D. Reginald Tibbetts

Mr. and Mrs. Walter R. Truland Mr. and Mrs. James M. Walton

Honorable and Mrs. Thomas J.

Watson, Jr.

Mr. Raymond J. Wean, Jr.

Mr. Leigh R. Weiner

Mr. and Mrs. Keith S. Wellin Honorable John C. Whitehead

Mr. John W. Winn

Mr. and Mrs. David Wintermann

Mr. and Mrs. Thomas P. Wolf

Mr. and Mrs. Peter G. Wray

Mr. Norman E. Wymbs

Mr. Bernard J. Young

PATRON MEMBERS

Honorable and Mrs. James E. Akins

Mr. and Mrs. Charles R. Ball, Jr.

Mr. John Baum

Mr. and Mrs. Steve Bay

Mr. John L. Black

Ms. Maritha Blalock

Mr. and Mrs. Townsend Burden, III

Mrs. R. M. Burgess

Mr. Donald E. Callahan

Mrs. Harold W. Cheel

Dr. and Mrs. David A. Cofrin

Mrs. Jeanne Collier

Colonel J. M. Compton

Mr. Charles Alfred Davis

Mr. Lowell DeYoung

Mrs. J. Gardiner

Mr. and Mrs. Daniel D. Gilbert

Mr. Theodore J. Hadraba, Jr.

Mr. John Ippolito

Ms. Diane M. Laird-Ippolito

Dr. Charles Joseph

Mr. and Mrs. Richard B. Kaufmann

Dr. William M. King

Mr. and Mrs. J. W. Levan

Mr. Gayle W. Lichtenstein

Mrs. Eunice K. Lipkowitz

Mr. and Mrs. Edward J. Mathias

Mr. and Mrs. Terence McAuliffe

Mr. and Mrs. Peter Monrose

Mr. David R. Monz

Mr. Michael A. Moran

Mr. Anthony John Mourek

Mr. and Mrs. James Mulshine

Dr. and Mrs. Clifford M. Nelson

Mr. Donald O. Noehre

Mr. Robert C. Ochsner

Mrs. Mary J. Papworth

Mr. and Mrs. Laurence B. Pike

Mrs. Helen G. Price

Mr. Thomas D. Rogers

Mrs. Gilbert H. Ruderman

Mr. C. W. Scott

Ms. M. L. Sibley

Mr. and Mrs. M. Silverman

Mr. and Mrs. Sanford Slavin

Mr. William C. Sterling, Jr.

Dr. Jeremy P. Waletzky

Dr. Lucy R. Waletzky

Ms. Patricia F. Wheeler

Mr. Andrew W. Williams

Mrs. Ellen B. Wood

Appendix 10
Visitors to Smithsonian Institution Museums in Fiscal Year 1986

21,249,237	5,143,334	308,236	7,752,544	5,962,073	1,047,397	1,035,653	SIVALAL
1,123,180	231,975	21,632	416,126	293,626	83,690	76,131	Septender
2,602,052	580,757	36,203	984,870	702,889	148,024	149,309	August
2,479,943	638,518	33,595	933,037	727,841	146,952	124,795	July
2,105,063	590,022	30,435	701,471	673,588	109,547	111,049	June
2,340,681	724,010	33,172	758,238	630,999	99,570	94,692	May
2,701,809	736,250	32,163	945,925	774,885	99,711	112,875	April
1,918,206	413,343	29,432	703,819	598,810	84,069	88,733	1147641
894,591	189,853	15,859	361,928	238,836	43,187	44,928	Pebrus J
809,394	175,728	14,371	327,327	212,175	38,195	41,598	January 1986
996,361	246,581	15,313	379,238	257,860	51,903	45,466	December
1,518,566	287,029	23,041	597,446	482,428	63,939	64,683	November
1,523,547	329,268	23,020	643,119	368,136	78,610	81,394	Ostober 1985
TOPALS	NATIONAL MUSEUM OF AMERICAN HISTORY	FREER GALLERY OF ART	AIR AND SPACE BUILDING	NATURAL HISTORY BUILDING	ARTS AND INDUSTRIES BUILDING	SMITHSONIAN INSTITUTION BUILDING	HAINOM

F N TOTALS	0 134,068	8 123,342	2 94,009	4 87,834	5 94,250	3 177,595	6 179,658	6 185,860	1 189,875	182,939	203,866	135,344	5 1,788,640
MUSEUM OF AFRICAN ART	3,440	3,628	4,342	2,334	4,955	4,543	2,486	5,036	2,151	1	1		32,915
COOPER- HEWITT MUSEUM	8,910	8,642	12,050	12,896	15,640	19,502	16,972	13,296	16,665	7,987	30,684	27,507	190,751
ANACOSTIA NEIGIBORHOOD MUSEUM	2,268	2,424	2,262	2,243	3,071	3,382	3,975	3,555	3,473	4,645	2,734	2,282	36,314
HTRSHHORN MUSEUM	82,263	74,863	47,455	40,458	40,483	97,871	108,527	118,745	122,002	127,559	126,938	70,589	1,057,753
RENWICK GALI ERY	8,062	8,244	8,281	9,512	8,689	10,882	12,210	12,940	11,684	777,111	13,260	6,309	124,850
AMERICAN ARF & PORTRALF GALLERY	29,125	25,541	19,619	20,391	21,412	41,415	35,488	32,288	33,900	30,971	30,250	25,657	346,057
MONTH	October 1985	November	December	January 1986	February	March	$\Lambda_{ m l}$ vril	M.1Y		, kely	Zagus-i	Sand Carlada	TOTAL S

Grand Total

23,037,877

NOTE: Totals for each museum reflect the number of individual visitors counted several times. The grand total, therefore, represents the aggregate impossible to obtain exact visitor statistics. To overcome this difficulty, the Zoo has developed a reliable sampling system which was used to determine of museum visitor counts, and is higher than the actual number of individual visitors to the Smithsonian Institution. / Not reflected in the above tabuin fiscal year 1986. The very nature of the Park, with its indoor and outlation are an estimated 3,000,000 visitors to the NATIONAL ZOOLOGICAL PARK door exhibits and its several vehicular and pedestrian entrances, makes it itinerary, or go to various museums on several consecutive days, they are to that museum. Since many visitors include more than one museum on their the fiscal year 1986 estimate of 3,000,000 visitors.



TOTALS	134,068	123,342	94,009	87,834	94,250	177,595	179,658	185,860	189,875	182,939	203,866	135,344	1,788,640
MUSEUM OF AFRICAN ART	3,440	3,628	4,342	2,334	4,955	4,543	2,486	5,036	2,151	1	ı	3	32,915
COOPER- HEWITT MUSEUM	8,910	8,642	12,050	12,896	15,640	19,502	16,972	13,296	16,665	7,987	30,684	27,507	190,751
ANACOSTIA NEIGIBORHOOD MUSEUM	2,268	2,424	2,262	2,243	3,071	3,382	3,975	3,555	3,473	4,645	2,734	2,282	36,314
HIRSHHORN MUSEUM	82,263	74,863	47,455	40,458	40,483	97,871	108,527	118,745	122,002	127,559	126,938	70,589	1,057,753
RENWICK GALLERY	8,062	8,244	8,281	9,512	8,689	10,882	12,210	12,940	11,684	777,111	13,260	6,309	124,850
AMERICAN ART & PORTRAIT CALLERY	29,125	25,541	19,619	20,391	21,412	41,415	35,488	32,288	33,900	30,971	30,250	25,657	346,057
MONTH	October 1985	November:	December	January 1986	February	March	April	PERY	mue	July	August.	Specular	lynal, S

Grand Total

the Zoo has developed a reliable sampling system which was used to determine NOTE: Totals for each museum reflect the number of individual visitors counted several times. The grand total, therefore, represents the aggregate impossible to obtain exact visitor statistics. To overcome this difficulty, visitors to the Smithsonian Institution. / Not reflected in the above tabuof museum visitor counts, and is higher than the actual number of individual in fiscal year 1986. The very nature of the Park, with its indoor and outlation are an estimated 3,000,000 visitors to the NATIONAL ZOOLOGICAL PARK door exhibits and its several vehicular and pedestrian entrances, makes it to that museum. Since many visitors include more than one museum on their itinerary, or go to various museums on several consecutive days, they are the fiscal year 1986 estimate of 3,000,000 visitors.



	,	

